SAMSUNG

User Manual

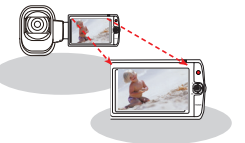
Memory Camcorder

www.samsung.com/register

SMX-F40BN/SMX-F40SN/SMX-F40RN/SMX-F40LN
SMX-F400BN/SMX-F400SN/SMX-F400RN/SMX-F400LN
SMX-F43BN/SMX-F43SN/SMX-F43RN/SMX-F43LN
SMX-F44BN/SMX-F44SN/SMX-F44RN/SMX-F44LN

key features of your memory camcorder

High-resolution color widescreen LCD (2.7" WIDE TFT LCD)



Samsung memory camcorder utilizes a 2.7-inch 230k pixel Widescreen LCD which allows bright and clear monitoring. In addition, the LCD Enhancer adjusts color and brightness to the screen lighting conditions for better monitoring under strong sunlight.

H.264/AVC (MPEG4 part 10/Advanced Video Coding) encoding

Latest video compression technology, H.264, uses a high compression rate to sharply increase the recordable time with the same size storage.

Simple & easy user interface

Designed to provide optimized and easy use with an ergonomic design. An improved Graphics User Interface offers a new and fresh look as well as an easy operation. Left-side touch buttons provide a new and interactive way to access basic functions.

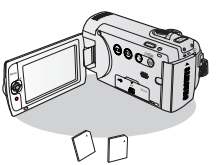
Animated thumbnail view

The camcorder displays an animated preview in the video thumbnail mode. When you highlight a thumbnail, the selected thumbnail will show the video playback. This animated thumbnail feature simplifies the way you search for a video clip.

Automatic scene detection

User-friendly SMART AUTO optimizes your memory camcorder to the recording conditions automatically, providing beginners with the best performance.

Twice the memory options (Built-in memory(8GB(SMX-F43 only),16GB(SMX-F44 only)))



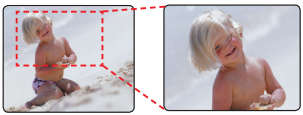
The memory camcorder's external memory slot accepts high capacity SDHC cards. Play and transfer videos quickly and easily using the memory type of your choice.
In addition to this slot, the memory camcorder has built-in memory.

High-resolution image through Mobile DNIe

The Samsung memory camcorder has 3DNR (3-dimensional noise reduction), high-sensitivity color expression (intelligent color expression), High performance Anti-Shake (HDIS: Hyper DIS) and automatic face detection features.

Capture visions further than the eye can see : 52x Optical Power Zoom, 65x Intelli-Zoom, and 2200x Digital Zoom

Samsung's powerful optical zoom lenses bring the world closer without losing image quality. In addition, Digital Zoom Interpolation enables clearer digital zooming, with less distortion than previous types of digital zooms.



Time lapse recording catches the moment

You can record a long scene in short intervals. Record artistic, documentary videos including the passage of clouds, blooming flowers etc. Use this function to make UCC (User Created Contents) videos, educational programs or for other purposes.

Direct upload of your videos to the web!

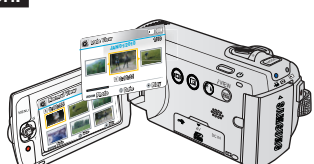
The built-in editing Intelli-studio software installs directly from this camcorder to your PC, enabling convenient connection with a USB cable. Intelli-studio also allows direct uploading of your contents to websites such as YouTube, Flickr and Facebook. Sharing the contents with your friends is simpler than ever before.

Make a digest of your video with Storyboard Printing!

This function captures 16 still images arbitrarily from the selected video and saves them into the storage media. It presents a quick overview of your video, helping you to understand the overall topic.

Various methods for playback with the Multi View Option!

Multi View Option enables you to sort thumbnails of recorded videos and photos by different display options (recording, recorded date). This function is useful when playing back recorded files in your preferred order.



before reading this user manual

SAFETY WARNINGS

What the icons and signs in this user manual mean;

WARNING	Means that there is a potential risk of death or serious injury.
CAUTION	Means that there is a potential risk of personal injury or damage to the product.
CAUTION	To prevent potential malfunction to the camcorder or to maintain the current setting.
	Means hints or referential pages that may be helpful when operating the camcorder.
PRECHECK!	Settings required before using a function.

These warning signs are here to prevent injury to you and others.
Please follow them explicitly. After reading this section, keep it in a safe place for future reference.

PRECAUTIONS

Warning!

- This camcorder should always be connected to an AC outlet with a protective grounding connection.
- Batteries should not be exposed to excessive heat such as sunshine, fire or similar.

Caution

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

IMPORTANT INFORMATION ON USE

Before using this camcorder

- **This camcorder is designed exclusively for use with the high-capacity built-in memory (8GB(SMX-F43 only), 16GB(SMX-F44 only)) and an external memory card.**
- **This camcorder records video in H.264/AVC (MPEG4 part 10/Advanced Video Coding) format compliant with the Standard resolution (SD-VIDEO) format.**
- **Please note that this camcorder is not compatible with other digital video formats.**
- **Before recording important video, make a trial recording.**
  Play back your trial recording to make sure the video and audio have been recorded properly.
- **The recorded contents cannot be compensated for:**
  - Samsung cannot compensate for any damage caused when a recording cannot be played back because of a defect in the camcorder or memory card. Samsung cannot be responsible for your recorded video and audio.
  - Recorded contents may be lost due to a mistake when handling this camcorder or memory card, etc. Samsung shall not be responsible for compensation for damages due to the loss of recorded contents.
- **Make a backup of important recorded data.**
  Protect your important recorded data by copying the files to a PC. We also recommend you to copy it from your PC to other recording media for storage.
  Refer to the software installation and USB connection guide.
- **Copyrights: Please note that this camcorder is intended for individual use only.**
  Data recorded on the storage media in this camcorder using other digital/analog media or devices is protected by the copyright act and cannot be used without permission of the owner of the copyright, except for personal enjoyment. Even if you record an event such as a show, performance or exhibition for personal enjoyment, it is strongly recommended that you obtain permission beforehand.

About this user manual

Thank you for purchasing this Samsung Camcorder. Please read this user manual carefully before you use the camcorder and keep it handy for future reference. Should your camcorder fail to operate correctly, refer to Troubleshooting.

This User Manual covers models SMX-F40, SMX-F400, SMX-F43 and SMX-F44.

- The SMX-F40 and SMX-F400 do not have built-in flash memory and uses memory cards. Although some features of SMX-F40, SMX-F400, SMX-F43, SMX-F44 models are different, they operate in the same way.
- Illustrations of model SMX-F40 are used in this user manual.

before reading this user manual

- The displays in this user manual may not be exactly the same as those you see on the LCD screen.
- Designs and specifications of the camcorder and other accessories are subject to change without any notice.
- In this user manual's function descriptions, the icon on the on-screen display section means that it will appear on the screen when you set the corresponding function.
  Ex) TV Super Fine - **"Video Resolution"** Submenu item ➥page 47

item	contents	on-screen display
"TV Super Fine"	Videos recorded in 720x480(60i) resolution at super-fine image quality.	

(If set, corresponding icon ( ) will appear on the screen.)

- Descriptions of the "built-in memory" in this user manual apply only to the following models: SMX-F43(8GB), SMX-F44(16GB)

The following terms are used in this manual:

- 'Scene' refers to the point where you press the Record Start/Stop button to start recording until you press again to pause the recording.
- The terms 'photo' and 'still image' are used interchangeably with the same meaning.
- For Open Source licenses information, refer to the "Opensource.pdf" in the provided CD-ROM.

Notes regarding trademarks

- All the trade names and registered trademarks mentioned in this manual or other documentation provided with your Samsung product are trademarks or registered trademarks of their respective holders.
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- All the other product names mentioned here in may be the trademark or registered trademarks of their respective companies. Furthermore, "TM" and "®" are not mentioned in each case in this manual.

important safety instructions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Warning

To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Apparatus To Rain Or Moisture.

Caution

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachment/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.

When a cart is used, use caution when moving the cart/apparatus combination to avoid injury fromtip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
16. VENTILATION:
    Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the CAMCORDER and to protect it from overheating. These openings must not be blocked or covered. Never place your CAMCORDER on a bed, sofa, rug, or other similar surface: on or near a radiator or heat register. This CAMCORDER should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

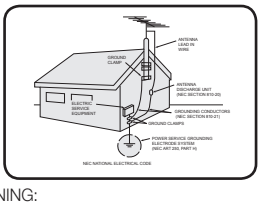
important safety instructions

17. POWER SOURCES:
The CAMCORDER should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supply at your home, consult your appliance dealer or local power company. A CAMCORDER is intended to be operated from battery power, or other sources, refer to the operating instructions.

18. GROUNDING OR POLARIZATION:
This CAMCORDER may be equipped with either a polarized 2-wire AC line plug (a plug having one blade wider than the other) or a 3-wire grounding type plug, a plug having a third (grounding) pin. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to replace your outlet. Do not defeat the safety purpose of the polarized plug.

19. POWER-CORD PROTECTION:
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords or plugs, convenient receptacles, and the point where they exit from the unit.

20. OUTDOOR ANTENNA GROUNDING:
CAMCORDER, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges, Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire and supporting structure, grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding to conductors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See figure below.



21. LIGHTNING:
For added protection of this CAMCORDER during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the CAMCORDER due to lightning and powerline surges.

22. POWER LINES:
An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

23. OVERLOADING:
Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

24. OBJECTS AND LIQUIDS:
Never push objects of any kind into this CAMCORDER through openings as they may touch dangerous voltage points or short out a part that could result in a fire or electric shock. Never spill liquids of any kind onto the CAMCORDER. Should spillage occur, unplug unit and have it checked by a technician before use.

25. SERVICING:
Do not attempt to service this CAMCORDER yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

26. DAMAGE REQUIRING SERVICE:
Unplug this CAMCORDER from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- **a.** When the power-supply cord or plug is damaged.
- **b.** If any liquid has been spilled onto, or objects have fallen into the CAMCORDER.
- **c.** If the CAMCORDER has been exposed to rain or water.
- **d.** If the CAMCORDER does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the CAMCORDER to its normal operation.Z
- **e.** If the CAMCORDER has been dropped or the cabinet has been damaged.
- **f.** When the CAMCORDER exhibits a distinct change in performance, this indicates a need for service.

27. REPLACEMENT PARTS:
When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer and having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

28. SAFETY CHECK:
Upon completion of any service or repairs to this CAMCORDER, ask the service technician to perform safety checks to determine that the CAMCORDER is in safe operating order.

29. To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.

30. If this power supply is used at 240V ac, a suitable plug adaptor should be used.

USER INSTALLER CAUTION:
Your authority to operate this FCC certified equipment could be voided if you make changes or modifications not expressly approved by this party responsible for compliance to part 15 FCC rules.
NOTE:
(Hg) LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. For details see lamprecycle.org, eiae.org, or call 1-800-Samsung (7267864)

CALIFORNIA USA ONLY
This Perchlorate warning applies only to primary CR (Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA
" Perchlorate Material - special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help and for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This Booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

FCC Warning
The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions;
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

safety information

The safety precautions illustrated below are to prevent personal injury or material damages. Heed all instructions carefully.

WARNING
Means that there is a potential risk of serious personal injury.

CAUTION
Means that there is a potential risk of personal injury or damage to the product

Prohibited action.

Do not disassemble the product.

Unplug from the power supply.

Do not touch the product.

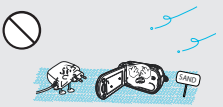
This precaution must be kept.

⚠ WARNING

Do not overload outlets or extension cords as this may result in abnormal heat or fire.

Using the camcorder at temperatures over 60℃(140℉) may result in fire. Keeping the battery at a high temperature may cause an explosion.

Do not allow water or metal and inflammable matter to enter the camcorder or AC power adaptor. Doing so may pose a fire hazard.



No sand or dust! Fine sand or dust entering the camcorder or AC power adaptor could cause malfunctions or defects.

No oil! Oil entering the camcorder or AC power adaptor could cause electric shock, malfunctions or defects.

Do not aim the LCD screen directly into the sun. Doing so could cause eye injuries, as well as lead to malfunctioning of internal parts of the product.

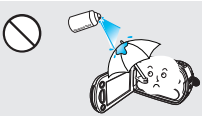
Do not bend the power-cord or damage the AC power adaptor by pressing on it with a heavy object. There may be a risk of fire or electric shock.

Do not disconnect the AC adaptor by pulling on its power-cord, as this could damage the power-cord.

Do not use the AC adaptor if it has damaged, split or broken cords or wires. Doing so may cause fire or electric shock.

Do not connect the AC adaptor unless the plug can be fully inserted with no part of the blades exposed.

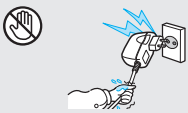
Do not dispose of battery pack in a fire as it may explode.



Never use cleaning fluid or similar chemicals. Do not spray cleaners directly on the camcorder.

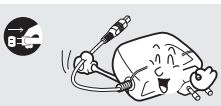
Keep the camcorder away from water when used near the beach or pool or when it rains. There is a risk of malfunction or electric shock.

Keep the used lithium battery or memory card out of the reach of children. If the lithium battery or memory card is swallowed by children, consult physician immediately.

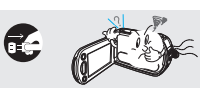


Do not plug or unplug the power cord with wet hands. There is a risk of electric shock.

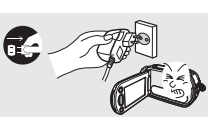
Keep the power-cord unplugged when not in use or during lightning storms. There is a risk of fire.



When cleaning the AC adaptor, unplug the power-cord. There is a risk of malfunction or electric shock.



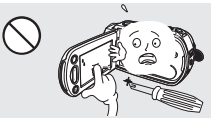
If the camcorder makes an abnormal sound, or smell or smokes, unplug the power-cord immediately and request service from a Samsung service center. There is a risk of fire or personal injury.



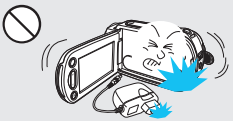
If the camcorder malfunctions, immediately detach the AC adaptor or battery from the camcorder.
There is a risk of fire or injury.

Do not attempt to disassemble, repair, or reform the camcorder or the AC adaptor to avoid a risk of fire or electric shock.

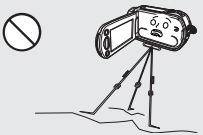
⚠ CAUTION



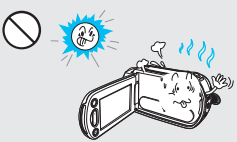
Do not press the surface of the LCD with force, or hit it with a sharp object. If you push the LCD surface, display unevenness may occur.



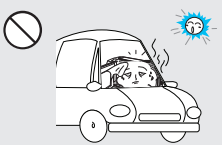
Do not drop or expose the camcorder, battery pack, AC adaptor or other accessories to severe vibrations or impact. This may cause a malfunction or injury.



Do not use the camcorder on a tripod (not supplied) in a place where it is subject to severe vibrations or impact.

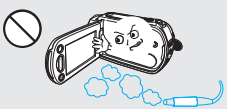


Do not use the camcorder near direct sunlight or heating equipment. This may cause a malfunction or injury.



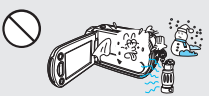
Do not leave the camcorder in a closed vehicle for a long time, where the temperature is very high.

Do not expose the camcorder to soot or steam. Thick soot or steam could damage the camcorder case or cause a malfunction.

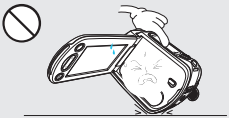


Do not use the camcorder near dense exhaust gas generated by gasoline or diesel engines, or corrosive gas such as hydrogen sulphide. Doing so may corrode the external or internal terminals, disabling normal operation.

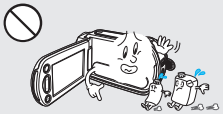
Do not expose the camcorder to insecticide. Insecticide entering the camcorder could cause the product to fail to operate normally. Turn the camcorder off and cover it with vinyl sheet, etc. before using insecticide.



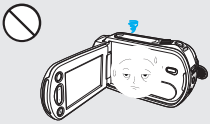
Do not expose the camcorder to sudden changes in temperature or a humid place. There is also a risk of defect or electric shock when using outdoors during lightning storms.



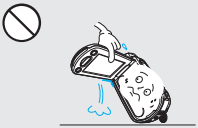
Do not place the camcorder with the open LCD screen down.



Do not wipe the camcorder body with benzene or thinner. The exterior coating could peel off or the case surface could deteriorate.

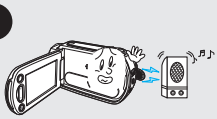


Do not leave the LCD screen open when not using the camcorder.

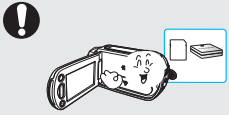


Do not hold the camcorder by the LCD monitor when lifting it. The LCD screen could detach and the camcorder may fall.

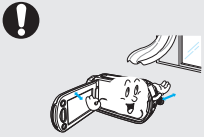
Do not use the camcorder near TV or radio: This could cause noise on the TV screen or to radio broadcasts.



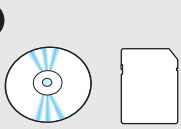
Do not use the camcorder near strong radio waves or magnetism such as speakers and a large motor. Noise could enter video or audio that are being recorded.



Use Samsung-approved accessories only. Using products from other manufacturers may cause overheating, fire, explosion, electric shock or personal injuries caused by abnormal operation.

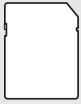


Place the camcorder on a stable surface and a place with ventilation openings.



Keep important data separately. Samsung is not responsible for data loss.

Use the mains plug where it can be readily operable. If any problem occurs with the product, the mains plug must be removed to disconnect power completely. Turning off the power button on the product does not completely disconnect the power.



Other manufacturers of optional accessories compatible with this camcorder is responsible for their own products. Use the optional accessories according to the safety instructions. Samsung shall not be responsible for any malfunction and risk of fire, electric shock and damages occurred by using unauthorized accessories.

contents

QUICK START GUIDE 05

05 You can record videos in H.264 format!

GETTING TO KNOW THE CAMCORDER 09

09 What's included with your camcorder
10 Location of controls

IDENTIFYING THE SCREEN DISPLAYS 12

12 LCD screen indicators

PREPARATION 17

17 Attaching the grip belt
17 Adjusting the LCD screen
18 Connecting a power source
20 Checking the battery state

BASIC OPERATION OF THE CAMCORDER 23

23 Turning your camcorder on/off
23 Switching to the power saving mode
24 Setting the operation modes
24 Using the display( ) touch button
25 Using the back light touch button
25 Using the LCD enhancer function
26 Shortcut menu (OK guide)
27 Shortcut function using the control joysticks
28 Setting the time zone and date/time for the first time
29 Selecting the languages

ABOUT THE STORAGE MEDIA 30

30 Selecting the storage media (SMX-F43/F44 only)
31 Inserting and removing a memory card (not supplied)
32 Selecting a suitable memory card

BASIC RECORDING 35

35 Recording videos
36 Taking photos
37 Quick view function in the record mode
38 Recording with ease for beginners (SMART AUTO mode)
39 Zooming

BASIC PLAYBACK 40

40 Changing the playback mode
41 Playing back videos
43 Viewing photos

RECORDING OPTIONS 44

44 Changing the menu settings
45 Menu items
46 iSCENE
47 Video Resolution
48 Photo Resolution
49 16:9 Wide
50 White Balance
52 Aperture
53 Shutter Speed
55 EV (Exposure Value)
56 C.Nite
57 Focus
59 Anti-Shake(HDIS)
60 Digital Effect
61 Fader
62 Wind Cut
63 Zoom Type
64 Time Lapse REC
66 Guideline

PLAYBACK OPTIONS 67

67 Menu items
68 Multi View Option
69 Play Option
70 Delete
71 Protect
72 Story-Board Print
73 Using *i*VIEW
74 Copy (SMX-F43/F44 only)
75 Edit (Divide)
76 Edit (Combine)
77 Slide Show
78 Slide Show Option
78 File Info

SYSTEM SETTING 79

79 Menu items (⚙)
80 Storage Type (SMX-F43/F44 only)
80 Storage Info
81 Format
82 File No.
82 Time Zone
84 Date/Time Set
84 Date Type
85 Time Type
85 Date/Time Display
86 LCD Brightness

contents

86 LCD Color
87 Auto LCD Off
87 Menu Design
88 Transparency
88 Beep Sound
89 Shutter Sound
89 Auto Power Off
90 PC Software
90 TV Display
91 Default Set
91 Version
91 Language
92 Demo

CONNECTING TO A TV 93
93 Connecting to a normal (standard definition) TV (16:9/4:3)

DUBBING VIDEOS 95
95 Dubbing to a VCR or DVD/HDD recorder

USING WITH A WINDOWS COMPUTER 96
96 Checking your computer type
97 What you can do with a Windows computer
98 Using the intelli-studio program
102 Using as a removable storage device

TROUBLESHOOTING 104
104 Troubleshooting

MAINTENANCE & ADDITIONAL INFORMATION 114
114 Maintenance
115 Additional information
116 Using your camcorder abroad

SPECIFICATIONS 117

quick start guide

This quick start guide introduces the basic operation and features of your camcorder.
See the reference pages for more information.

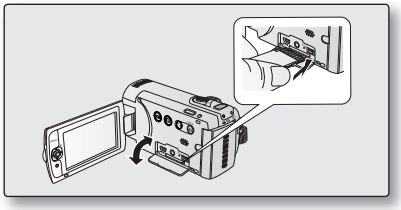
You can record videos in H.264 format!

You can record videos in H.264 format that is convenient to email and share with your friends and family.
You can also take photos with your camcorder.

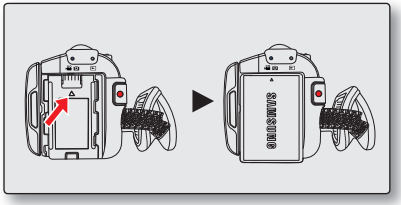
STEP1: Get ready

1. Insert a memory card. ➥page 31

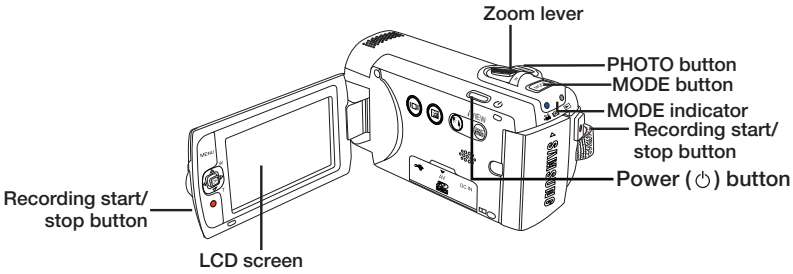
- You can use commercially available SDHC (SD High Capacity) or SD memory cards with this camcorder.
- Set the appropriate storage media. ➥page 30 (SMX-F43/F44 only)



2. Insert the battery into the battery slot. ➥page 18



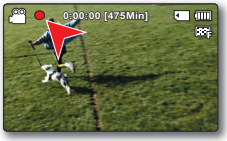
STEP2: Record with your camcorder



Recording videos with H.264 format

Your camcorder uses advanced H.264 compression technology to realize the clearest video quality. ➥ page 47

1. Open the LCD screen and press the **Power** (⏻) button to turn on the camcorder.
   - Set the lens cover open/close switch to open (◖).
2. Press the **Recording start/stop** button.
   - To stop recording, press the **Recording start/stop** button.



Taking photos

1. Open the LCD screen and press the **Power** (⏻) button to turn on the camcorder.
   - Set the lens cover open/close switch to open (◖).
2. Press the **PHOTO** button fully when you are ready.

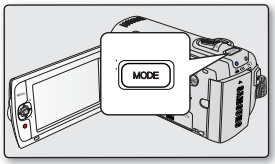
- Your camcorder is compatible with H.264 recording format, which achieves efficient coding of high quality video with less capacity.
- You can record videos in SD (standard definition). The default setting is **"TV Fine (720x480/60i)."** ➥ page 47
- You can not take photos while you are recording videos.

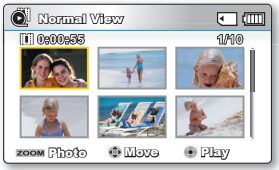
STEP3: Play back videos or photos

Viewing the LCD screen of your camcorder

You can find your desired recordings quickly by using the thumbnail index view.

1. Press the **MODE** button to select the Play mode.
   - The thumbnail index view appears. The thumbnail of the latest created or played file is highlighted.
2. Select the Video or Photo thumbnail index view screen.
   - You can simply switch between video and photo thumbnail view using the zoom lever.
3. Use the Control **(▲/▼/◀/▶)** joystick to select a desired video or photo, and then press the Control button **(OK)**.





Viewing on a TV

- You can enjoy detailed, brilliant quality videos on a connected TV. ➥ pages 93~94

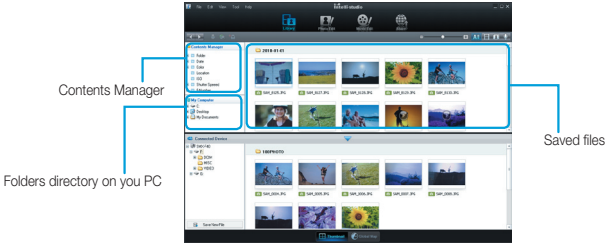
STEP4: Save recorded videos or photos

Simple and fun! Enjoy the various features of Intelli-studio on your Windows computer.

Using the Intelli-studio program built in your camcorder, you can import video/photos onto your computer, edit or share the videos/photos with your friends. For details, see pages 98~101.

Viewing the videos/photos from your PC

1. Launch the Intelli-studio program by connecting the camcorder to your PC via the USB cable.
   - A new file saving screen appears with the Intelli-studio main window. Click "**Yes,**" the uploading procedure will start.
2. The new files are saved to your PC and registered to **"Contents Manager"** on the Intelli-studio program.
   - You can arrange the files by different options such as Face, Date, Location, etc.



3. You can double-click on the file you would like to start playback.

Sharing the videos/photos onto YouTube/Flickr/Facebook

Share your contents with the world, by uploading photos and videos directly to a web site with a single click.
Click on the **"Share" → "Upload"** tab on the browser. ➥page 101

The Intelli-studio runs automatically once the camcorder is connected to a Windows computer (when you specify "**PC Software: On**"). ➥ page 90

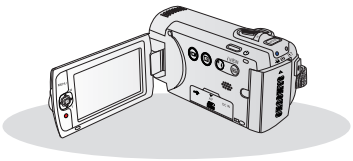
STEP5: Delete videos or photos

If the storage media is full, you cannot record new videos or photos. Delete videos or photos data that have been saved on a computer from the storage media. Then you can record new videos or photos on newly freed up space.

Press the MODE button to switch the Play mode → Press the MENU button → Control joystick (▲/▼/◀/▶/OK) to select "Delete." ➥page 70

WHAT'S INCLUDED WITH YOUR CAMCORDER

Your new camcorder comes with the following accessories. If any of these items is missing from your box, call Samsung's Customer Care Center.



Model name	Color	built-in memory	Memory card slot	LCD screen	Lens
SMX-F40BN/ F400BN	Black	-	1 slot	Color	52x (Optical), 65x (Intelli), 2200x (Digital)
SMX-F40SN/ F400SN	Silver				
SMX-F40RN/ F400RN	Red				
SMX-F40LN/ F400LN	Blue				
SMX-F43BN	Black	8GB			
SMX-F43SN	Silver				
SMX-F43RN	Red				
SMX-F43LN	Blue				
SMX-F44BN	Black	16GB			
SMX-F44SN	Silver				
SMX-F44RN	Red				
SMX-F44LN	Blue				

- The shape is the same for all models. Only the color is different.

Checking your accessories

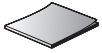
Battery pack
(IA-BP210E)
(AD43-00196A)

AC power adaptor
(AA-MA9 type)
(AD44-00151A)

Audio/Video cable
(AD39-00155A)

USB cable
(AD39-00169A)

User manual CD
(AD46-00292A)



Quick start guide
(AD68-04500A)

Optional accessories

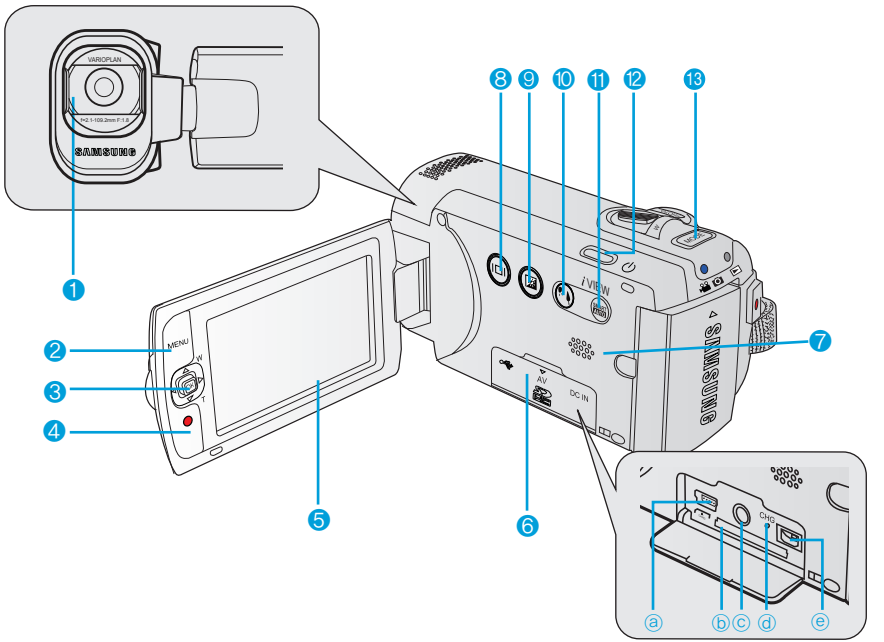
Carrying case
(AD69-00929A)

Memory card
(1109-001415)

- The exact appearance of each item may vary by model.
- The contents may vary depending on the sales region.
- Parts and accessories are available for purchase at your local Samsung dealer. SAMSUNG is not responsible for reduced battery life time or malfunctions caused by any unauthorized use of accessories such as the AC adaptor or the batteries.
- A memory card is not included. See page 32 for memory cards compatible with your camcorder.
- Your camcorder includes a user manual CD and a quick start guide (printed).
- Optional accessories: This is an optional accessory. To buy one, contact your nearest Samsung dealer.

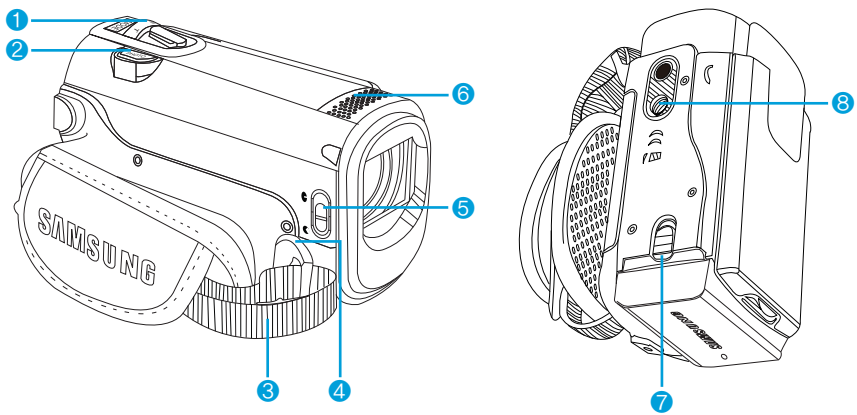
LOCATION OF CONTROLS

Front & Left View



1	Lens
2	**MENU** button
3	**Control** joystick (**▲/▼/◀/▶/OK**), **Zoom (W/T)** joystick
4	**Recording start/stop** button
5	LCD screen
6	Memory card/Jack cover ⓐ USB jack (⇆) ⓑ Memory card slot ⓒ AV jack (AV) ⓓ CHG (charging) indicator ⓔ DC IN jack (DC IN)
7	Built-in speaker
8	**Display** (▭) touch button
9	**LCD Enhancer** (▨) touch button
10	**Back Light** (☀) touch button
11	**SMART AUTO** touch button / **i VIEW** touch button
12	**Power** (⏻) button
13	**MODE** button

Right Top & Bottom View



1	Zoom lever (W/T)	5	Lens cover open ( )/close ( ) switch
2	**PHOTO** button	6	Internal microphone
3	Grip belt	7	Battery pack release switch (**BATT.**)
4	Grip belt hook	8	Tripod receptacle

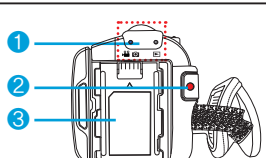
Be careful not to cover the internal microphone and lens during recording.

Rear View

1 Mode indicator
: Record mode (Video/Photo)
: Play mode

2 Recording start/stop button

3 Battery pack slot



identifying the screen displays

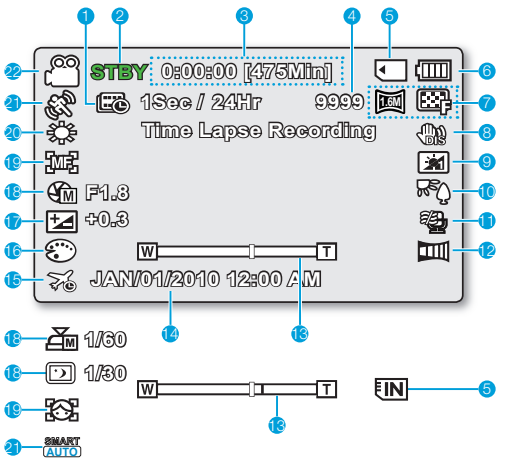
The available functions vary depending on the selected operation mode, and different indicators appear depending on the setting values.

LCD SCREEN INDICATORS

Video and Photo record mode

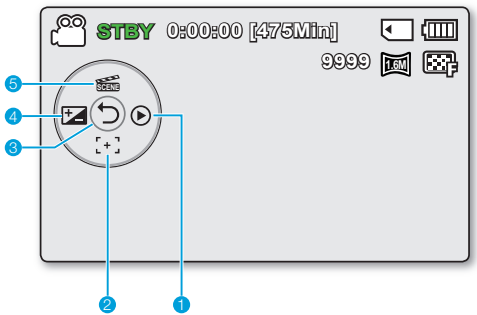
PRECHECK!

- This On Screen Display (OSD) is shown in Record (/) mode only.
- Press the **MODE** button to select the Record (/) mode. ➥ page 24



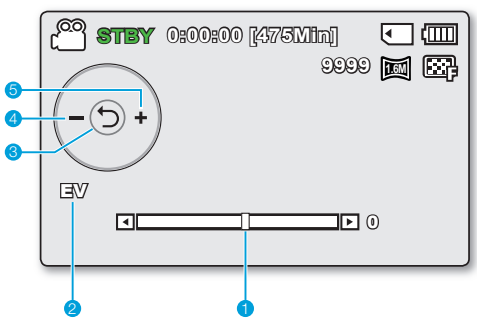
1	Time Lapse REC *
2	Operating mode (STBY (Standby) / ● (Recording))
3	Time counter (Video recording time: remaining recordable time)
4	Photo image counter (Total number of recordable photos)
5	Storage media (Memory card or built-in memory (SMX-F43/F44 only))
6	Battery info. (Remaining battery level)
7	Photo Resolution / Video Resolution
8	Anti-Shake (HDIS)
9	LCD Enhancer *
10	Back Light
11	Wind Cut
12	Fader *
13	Zoom (Optical Zoom / Intelli-Zoom / Digital Zoom)
14	Date/Time Display
15	Time Zone
16	Digital Effect
17	EV (Exposure Value) *
18	Manual Aperture */ Manual Shutter Speed */ C.Nite *
19	Manual Focus */ Face Detection *
20	White balance
21	iSCENE / SMART AUTO
22	Record mode (/)

- The above screen is an example for explanation: It is different from the actual display.
- The on-screen indicators are based on an 16GB SDHC memory card capacity.
- Functions marked with * will not be kept when the camcorder is turned off and on again.
- For enhanced performance, the display indications and the order are subject to change without prior notice.
- This camcorder provides one combined video and photo record mode. You can easily record videos or photos in the same mode without having to change it.
- The total number of recordable photos is counted based on available space on the storage media.
- The number of recordable photos on the OSD is a maximum of 9,999.



Video and Photo record mode : Shortcut menu (OK Guide)

1	Quick View
2	Focus* (Auto Focus/Face Detection / Manual Focus)
3	Shortcut menu (OK Guide) / Return
4	EV (Exposure Value) *
5	iSCENE



Video and Photo record mode : Shortcut menu (Manual)

1	Manual Control Bar/ Value
2	Menu name
3	Shortcut menu (OK Guide) / Return
4	Value adjust (down)
5	Value adjust (up)

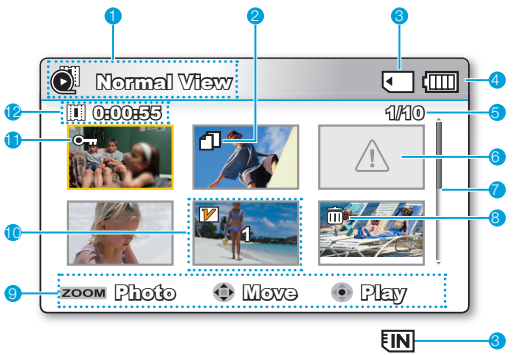
- The illustration above shows the EV (Exposure Value) screen.
- Functions marked with * will not be kept when the camcorder restarts.
- The shortcut menu (OK guide) represents the most frequently accessed functions according to the selected mode. Pressing the OK button will display a shortcut menu of frequently used functions on the LCD screen.

identifying the screen displays

Video Play mode

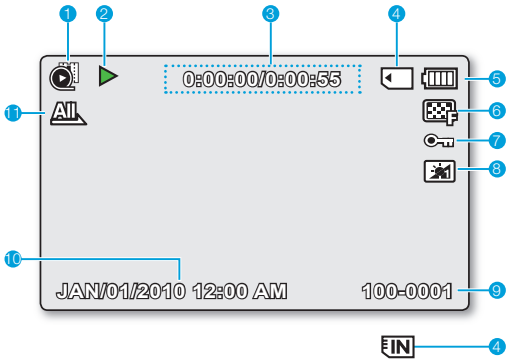
PRECHECK!

- This On Screen Display (OSD) is shown in Video play ( ) mode only.
- Press the **MODE** button to select the Play ( ) mode. ➥page 24



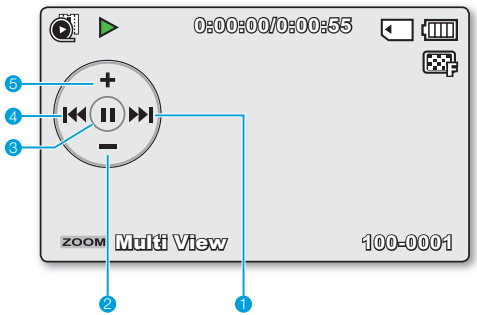
Video Play mode : Thumbnail View

1	Video Play mode
2	Copy Selected (SMX-F43/F44 only)
3	Storage media (Memory card or built-in memory (SMX-F43/F44 only))
4	Battery info (Remaining battery level)
5	Now / Total file number
6	Error File
7	Scroll bar
8	Delete Selected
9	Button Guide
10	Edit (Combine)
11	Protection
12	Recorded time



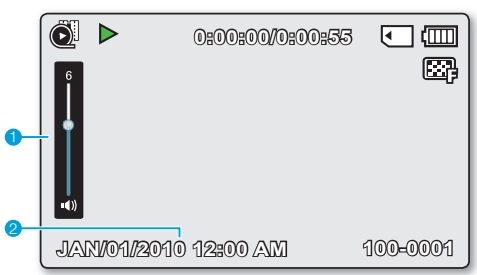
Video Play mode : Single View

1	Video Play mode
2	Play Status (Play (▶) / Pause (❚❚) / Search (◀◀ / ▶▶) / Frame-by-frame (◀❚/ ❚▶) / Slow motion (◀❚/ ❚▶))
3	Time code (Elapsed time / Recorded time)
4	Storage media (Memory card or built-in memory (SMX-F43/F44 only))
5	Battery info (Remaining battery level)
6	Video Resolution
7	Protection
8	LCD Enhancer
9	File Name (File number)
10	Date/Time Display
11	Play Option



Video Play mode : Shortcut menu (OK Guide)

1	Forward playback search ➥page 42 (Skip/Search/Slow motion/ Frame-by-frame)
2	Volume Down
3	Play (▶) / Pause (▮▮)
4	Reverse playback search ➥page 42 (Skip/Search/Slow motion/ Frame-by-frame)
5	Volume Up



Video Play mode : Single (Volume)

1	Volume Bar
2	Date/Time Display

Photo play mode

PRECHECK!

- This On Screen Display (OSD) is shown in Photo Play ( ) mode only.
- Press the **MODE** button to select the Play ( ) mode. ➥page 24

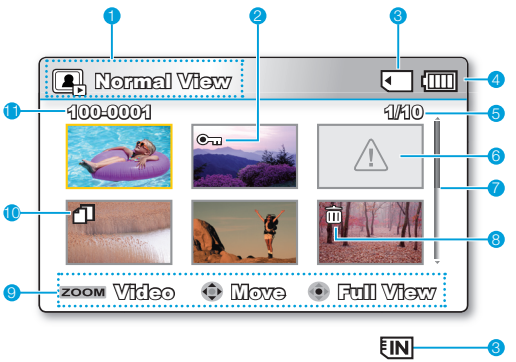


Photo Play mode : Thumbnail View

1	Photo Play mode
2	Protection
3	Storage media (Memory card or built-in memory (SMX-F43/F44 only))
4	Battery info (Remaining battery level)
5	Now / Total file number
6	Error File
7	Scroll bar
8	Delete Selected
9	Button Guide
10	Copy Selected (SMX-F43/F44 only)
11	File name (File number)

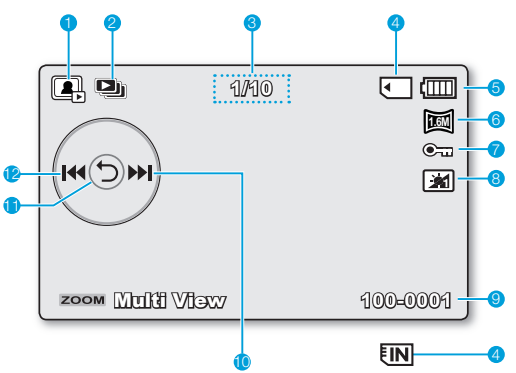


Photo Play mode : Single View

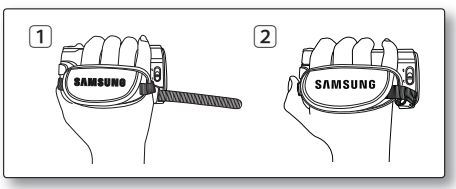
1	Photo Play mode
2	Slide Show
3	Image counter (Current image / total number of recorded images)
4	Storage media (Memory card or built-in memory (SMX-F43/F44 only))
5	Battery info (Remaining battery level)
6	Photo Resolution
7	Protection
8	LCD Enhancer
9	File Name (File number)
10	OK Guide (Next image)
11	Shortcut menu (OK Guide) / Return
12	OK Guide (Previous image)

preparation

This section provides information that you should know before using this camcorder: such as how to use the provided accessories, how to charge the battery, and how to setup the operation mode and initialise setup.

ATTACHING THE GRIP BELT

Adjust the length of grip belt so that the camcorder is stable when you press the Recording start/stop button with your thumb.



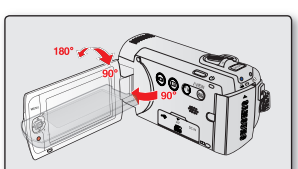
Please note if the hand strap is adjusted too tight and you use excessive force to insert your hand, the hand strap hook of the camcorder may be damaged.

ADJUSTING THE LCD SCREEN

The wide LCD screen on your camcorder offers high quality image viewing.

1. Open the LCD screen with your finger.
- The screen opens up to 90°.

2. Rotate the LCD screen towards the lens.
- You can rotate it up to 180° towards the lens and up to 90° backward. To view recordings more conveniently, rotate the screen by 180° towards the lens, then fold it back to the body.



Excessive rotation may damage the connective hinge between the screen and the camcorder.

- When the LCD screen is rotated by 180°, the left and right sides of the subject are shown in reverse, which produces horizontally flipped image.
- Remove fingerprints or dust on the screen with a soft cloth.
- To adjust the LCD brightness and color, refer to the page 86.
- The super fine LCD technology enabled about 99.99% pixels on the LCD screen. Although one or two black dots or bright dots(red, blue, white) could appear on the screen, this is not a malfunction and does not affect the recorded image.

CONNECTING A POWER SOURCE

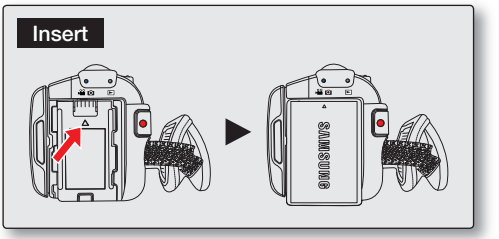
- Be sure to charge the battery pack before you start using your camcorder.
- Use the **IA-BP210E** battery pack only.
- The battery pack may be charged a little at the time of purchase.

Battery pack insertion/ejection

It is recommended you purchase one or more additional battery packs to allow continuous use of your camcorder.

Inserting the battery pack

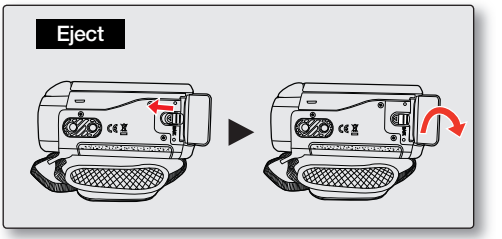
1. Insert the battery pack into the battery pack slot until it softly clicks.
   - Make sure that the SAMSUNG logo is facing front when the camcorder is placed as shown in the figure.



Ejecting the battery pack

1. Gently push the **Battery pack release** switch in the direction as shown in the diagram to eject the battery.

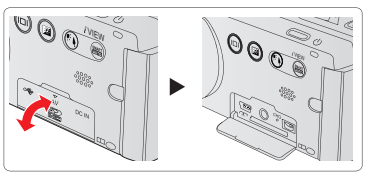
2. Push down and lift the battery pack to pull out in the direction as shown in the diagram.



- Use only Samsung-approved battery packs. Do not use batteries from other manufacturers. Otherwise, there is a danger of overheating, fire or explosion.
- Samsung is not responsible for problems occurring due to using unapproved batteries.
- Remove the battery pack separately from the camcorder while not in use.
- It is recommended to prepare an additional battery pack for prolonged outdoor use.
- Additional battery packs can be purchased from samsungparts.com.

Charging the battery

You can charge the battery using the AC power adaptor or USB cable.



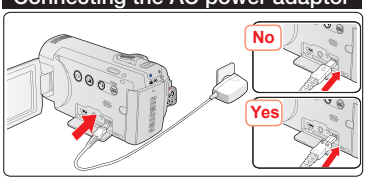
PRECHECK!

- Charge the battery pack before using the camcorder.
- Use only the provided battery pack and AC power adaptor.

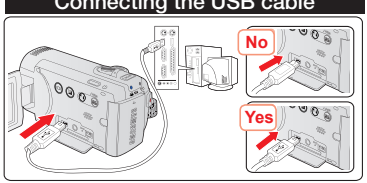
1. Press the **Power** (⏻) button to turn off the camcorder. ➥page 23
2. Insert the battery in the camcorder. ➥page 18
3. Open the connector cover of the unit.
4. Charge the battery using the **AC power adaptor or USB cable**.
   - The CHG (charge) lamp lights up and charging starts. When the battery is fully charged, the charging (CHG) lamp turns green. ➥page 20

Using the AC power adaptor	Connect the AC power adaptor to the camcorder properly and plug the AC power adaptor in the wall outlet.
Using the USB cable	Connect the USB cable to the camcorder properly and connect the other end to a USB port of a PC.

Connecting the AC power adaptor



Connecting the USB cable



- Charging the battery pack at low temperature may take longer or fail to fully charge (green indicator will not turn on).
- Please make sure that there are no foreign substances in the plug and socket when you connect the AC power supply to the camcorder.
- Fully charge the battery pack before use.
- When using the AC power supply, place it close to the wall outlet. If you experience a malfunction while using the camcorder, separate the AC power supply immediately from the wall outlet.
- Do not use the AC power supply in a tight space, such as between furnishings.

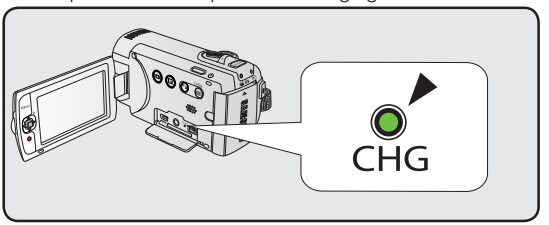
- When recording indoors with an available wall outlet, it is convenient to use the AC power supply instead of the battery pack.
- It is recommended to charge the battery pack in a place with ambient temperature of 10°C ~ 30°C(50°F~86°F).
- When charging, if both the USB cable and AC power adaptor are connected, the AC power adaptor will override the USB.
- If the camcorder is turned on, the battery will still charge, but more charging time will be needed. It is recommended you to keep the camcorder turned off while charging.

CHECKING THE BATTERY STATE

You can check the charging state and remaining battery capacity.

To check the charging state

The color of the CHG lamp indicates the power or charging state.



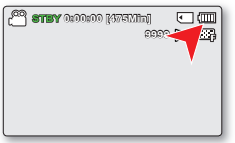
Charging (CHG) lamp

The color of the charging indicator shows the charging state.

Charging state	Charge		
	Charging	Fully Charged	Error
LED color	(Orange)	(Green)	(Orange Blink)

Battery Level Display

The Battery Level Display shows the amount of battery power remaining in the battery pack.



Battery Level Indicator	State	Message
	Fully charged (100%~75%)	-
	75%~50%	-
	50%~25%	-
	25%~5%	-
	less than 5%	-
	Exhausted (flickers): The device will soon turn off. Change the battery pack as soon as possible.	-
-	(flickers): The device will be forced to turn off after 3 seconds.	**"Low battery"**

- Before using the camcorder, charge the battery.
- Above figures are based on a fully charged battery pack at normal temperature. Low ambient temperature may affect the use time.

Available running time for the battery pack

Battery Type		IA-BP210E				
Charging time		Using a AC power adaptor			Approx. 180min.	
		Using a USB cable			Approx. 380min.	
Video Resolution		720 x 480 (60i)			640 x 480 (30p)	
		TV Super Fine (SF)	TV Fine (F)	TV Normal (N)	Web Fine (F)	Web Normal (N)
Mode	Continuous recording time	Approx. 250min.				
	Playback time	Approx. 280min.				

(Unit: minutes.)

- Charging time: Approximate time (min.) required when you fully charge a completely exhausted battery pack.
- We recommend using the AC power adaptor when using the Time Lapse REC function.

About battery packs

- The battery pack should be recharged in an environment that is between 50°F (10°C) and 86°F (30°C). However, when it is exposed to cold temperatures (below 32°F (0°C)), its usage time reduces and it may cease to function. If this happens, place the battery pack in your pocket or other warm, protected place for a short time, then re-insert it.
- Do not put the battery pack near any heat source (i.e. fire or a heater).
- Do not disassemble, apply pressure to, or heat the battery pack.
- Do not allow battery pack terminals to be short-circuited. It may cause leakage, generate heat, or cause fire.

Maintaining the battery pack

- The recording time is affected by temperature and environmental conditions.
- We recommend only using the original battery pack that is available from your Samsung retailer. When the battery reaches the end of its life, please contact your local dealer. The batteries have to be dealt with as chemical waste.
- Make sure that the battery pack is fully charged before starting to record.
- To preserve battery power, keep your camcorder turned off when you are not operating it.
- Even when the power is switched off, the battery pack will still discharge if it is left inserted on the camcorder. It is recommended that you remove the battery pack from the camcorder.
- If the battery pack is not used for a long time, fully charge the battery pack and use it up on your camcorder once every 6 months to maintain proper function. To store the battery pack, remove it from your camcorder and put it in a dry, cool place.

About the battery life

- Battery capacity decreases over time and through repeated use. If decreased usage time between charges becomes significant, it is probably time to replace it with a new one.
- Each battery's life is affected by storage, operating and environmental conditions.

About the running time

- Times measured when using the camcorder at 77°F (25°C). As the environmental temperature and conditions vary, the actual battery time may differ form the approximate times given in the table.
- The recording and playback time will be shorter depending on the conditions under which you use your camcorder. In actual recording, the battery pack may discharge 2-3 times faster than this reference, since the Record start/stop and Zoom are being operated, and playback is performed. Assume that the recordable time with a fully charged battery pack is between 1/2 and 1/3 of the time in the table, so have enough battery packs to allow for the time you are planning to record on the camcorder.
- The recording and playback time will be shorter when you use your camcorder in low temperatures.

On the battery pack

- The CHG (charging) lamp blinks during charging, or Battery Info will not be correctly displayed under the following conditions:
  - The battery pack is not inserted correctly.
  - The battery pack is damaged.
  - The battery pack is worn-out. (For the battery information only)

Using an AC power source

It is recommended that you use the AC power adaptor to power the camcorder from a household AC outlet when you perform settings on it, play back, or edit images, or use it indoors. Make the same connections as you do when charging the battery pack. ➥page 19

- Before detaching the power source, make sure that the camcorder's power is turned off. Failure to do so can result in camcorder malfunction.
- Use a nearby wall outlet when using the AC power adaptor. Disconnect the AC power adaptor from the wall outlet immediately if any malfunction occurs while using your camcorder.
- Do not use the AC power adaptor in a narrow space, such as between a wall and furniture.

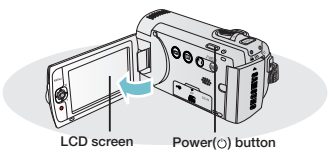
- Be sure to use the specified AC power adaptor to power the camcorder. Using other AC power adaptors could cause electric shock or result in fire.
- The AC power adaptor can be used around the world. An AC plug adaptor is required in some foreign countries. If you need one, purchase it from your distributor.

basic operation of the camcorder

This chapter introduces you to the basic operation procedures of this camcorder, such as turning the power on/off, switching modes, and setting on-screen indicators.

TURNING YOUR CAMCORDER ON/OFF

1. Open the LCD screen and press the **Power** (⏻) button to turn on the camcorder.
   - Set the lens cover open/close switch to open (◖).
2. To turn off the camcorder, press the **Power** (⏻) button.



The camcorder operates the self-diagnosis function when powered on. If a warning message appears, refer to '**warning indicators and messages**' (➥pages 104~106) and take corrective action.

When using this camcorder for the first time

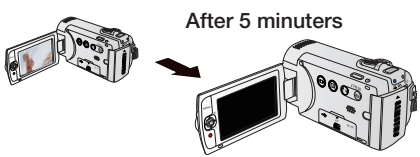
- When you use your camcorder for the first time or reset it, the time zone screen appears for the startup display. Select your geographical location and set the date and time.➥page 28
  If you do not set the date and time, the time zone screen appears every time you turn on the camcorder.

SWITCHING TO THE POWER SAVING MODE

If you need to use camcorder for the extended time, the following functions enable you to prevent unnecessary energy consumption.

Auto Power Off Function

- To save battery power, you can set the **"Auto Power Off"** function, which turns off the camcorder if there is no operation for 5 minutes.
- To disable this option, change the **"Auto Power Off"** setting to **"Off."** ➥page 89

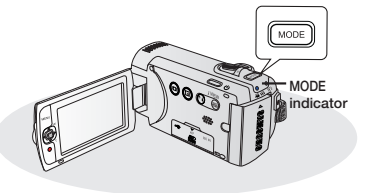


- The power saving mode does not work in the following situations:
  - When the camcorder has a cable connection. (USB or AV)
  - While recording, playback, or the slideshow is being operated.
- The camcorder consumes the less battery power in the power saving mode (about 50% of the power consumption in the standby mode) However, if you plan to use the camcorder for the maximum length of time period, it is recommended to turn off the camcorder by pressing the **Power** (⏻) button when not using it.

SETTING THE OPERATION MODES

You can switch the operating mode in the following order each time you press the **MODE** button.
Record mode (/) → Play mode ( ) → Record mode (/).

- Each time the operation mode changes, the respective mode indicator lights on.



Mode	Icon	Functions
Record mode	/	To record videos or photos.
Play mode		To play videos or photos, or edit them.

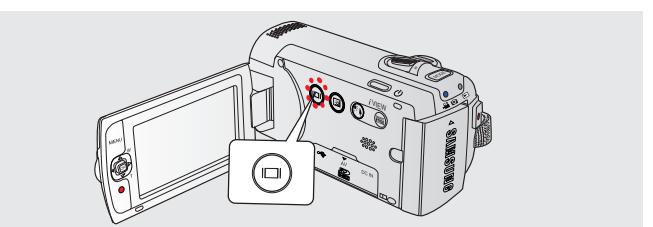
- This camcorder provides one record mode for both video and photo recordings. You can easily record videos or photos in the same mode without having to switch modes.

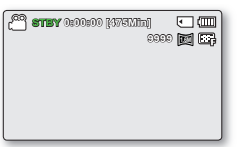
USING THE DISPLAY( ) TOUCH BUTTON

Switching the information display mode

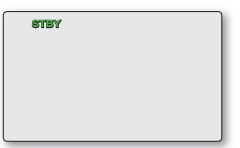
You can switch the on-screen information display mode.
Touch the **Display( )** touch button.

- The full and minimum display modes will alternate.





<Full display mode>



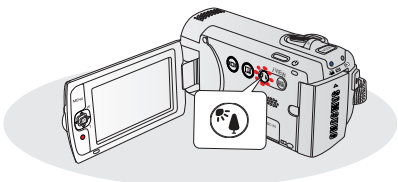
<Minimum display mode>

- Warning indicators and messages may appear depending on the recording conditions.
- In the menu screen, the **Display ( ) touch button** will be deactivated.

USING THE BACK LIGHT TOUCH BUTTON

When a subject is lit from behind, this function will compensate for lighting so that the subject is not too dark.

Touch the **Back Light** ( ) touch button to display ( ) icon on the screen. To cancel, touch the **Back Light** ( ) touch button again.



Back lighting influences recording when the subject is darker than the background:

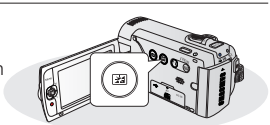
- The subject is in front of a window.
- The subject is against a snowy background.
- The subject is outdoors and the background is overcast.
- The light sources are too bright.
- The person to be recorded is wearing white or shiny clothes and is placed against a bright background:
  The person's face is too dark to distinguish his/her features.

<Backlight off>

<Backlight on>

USING THE LCD ENHANCER FUNCTION

- Contrast is enhanced for a clear and bright image. This effect is also implemented outdoors in bright daylight.
- You can also adjust the screen brightness in two-level increments, which provides a brighter screen than using just one-level increment for your recording.



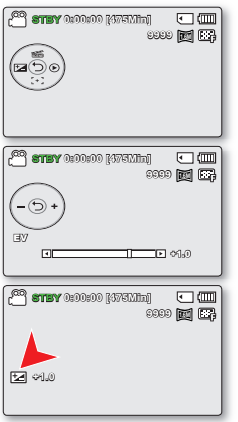
1. Touch the **LCD Enhancer** ( ) touch button.
   - LCD adjust ( ) indicator appears and the LCD brightens.
2. You can switch the LCD Enhancer function in the following order each time you touch the **LCD Enhancer** ( ) touch button.
   - LCD Enhancer 1-level ( ): LCD Enhancer is executed.
   - LCD Enhancer 2-level ( ): This setting is brighter than the LCD Enhancer 1-level.

- LCD Enhancer function does not affect the quality of the image being recorded.
- When LCD Enhancer is used in low illumination, some stripes may occur on the LCD screen. It is not a malfunction.
- Using the LCD Enhancer function may cause colors to look different on the display.

SHORTCUT MENU (OK GUIDE)

The Shortcut menu (OK guide) represents the most frequently accessed functions according to the selected mode.

✪ For example: Setting EV (Exposure Value) in the Record mode using the Shortcut menu (OK guide).



1. Press the **OK** button in STBY mode.
   - The Shortcut menu (OK guide) is displayed.
2. Move the **Control** joystick (◄) to select "**EV**" mode.
   - Move the **Control** joystick (◄/►) to adjust the exposure while viewing the image on the LCD screen.
3. Press the **OK** button to confirm your selection.
   - Press the **OK** button to exit the shortcut menu.
   - Exposure value setting will be applied and (XX) indicator and setting value are displayed.

- The Shortcut menu (OK guide) cannot be used in the SMART AUTO mode.
- The instruction above shows an example of setting EV mode in the Record mode. The setting procedure could be different by menu item

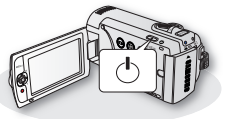
SHORTCUT FUNCTION USING THE CONTROL JOYSTICKS

Button	Record (/) mode	Play ( ) mode		Menu selection
		Video Play ( ) mode	Photo Play ( ) mode	
OK	- Access the shortcut menu - Confirm selection - Exit the shortcut menu	- Shortcut menu (OK guide) is displayed - Playback / Pause	Single image playback	Confirms selection
UP	- iSCENE - Zoom (wide)	Increases the volume	Increases the volume (during a slide show)	Moves the cursor up
DOWN	- Focus - Zoom (tele)	Decreases the volume	Decreases the volume (during a slide show)	Moves the cursor down
LEFT	EV	- Search playback RPS (Reverse Playback Search) rate: x2→x4→x8→x16 - Previous Skip Playback - Frame-by-frame playback - Slow motion playback (Reverse slow playback) rate: x1/2→x1/4→x1/8→x1/16	Previous image	Moves to the previous menu
RIGHT	Quick View	- Search playback FPS (Forward Playback Search) rate: x2→x4→x8→x16 - Next Skip Playback - Frame-by-frame playback - Slow motion playback (Forward slow playback) rate: x1/2→x1/4→x1/8→x1/16	Next image	Moves to the next menu

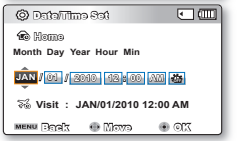
basic operation of the camcorder

SETTING THE TIME ZONE AND DATE/TIME FOR THE FIRST TIME

Set the date and time of your local area when turning on this camcorder for the first time.



1. Open the LCD screen and press the Power (⏻) button to turn on the camcorder.
   - The Time Zone ("**Home**") screen appears based on London, Lisbon (Greenwich Mean Time).
   - You can also set the "**Time Zone: Home**" from the Settings (⚙) menu. ➥page 82
2. Select your geographical area with **Control** joystick (◄/►), then press the **OK** button.
   - The Date/Time Set screen appears.
3. Select the date and time information, and change the setting values by using the **Control** joystick (▲/▼/◄/►).
   - To set the daylight saving, move the **Control** joystick (◄/►) to select the (☀) icon, then move the **Control** joystick (▲/▼) to set Daylight Saving on/off.
     - Activating Daylight Saving forwards the time by 1 hour.
4. Make sure the clock is correctly set, and then press the **OK** button.



- The year can be set up to 2037.
- Set "**Date/Time Display**" to "**On**." ➥page 85
- After setting, the date and time are automatically recorded on a special data area of the storage media.

Built-in rechargeable battery

- Your camcorder includes a built-in rechargeable battery that retains the date and time settings even after the power is turned off.
- Once the battery is depleted, the previous date/time values are all reset to defaults, and you need to recharge the built-in rechargeable battery. The date/time must be set again.

Charging the built-in rechargeable battery

- The built-in battery is always recharged while your camcorder is connected to the AC power or while the battery pack is attached. If the camcorder is not in use for about **2 months** without connecting to the AC power or attaching the battery pack, the built-in battery fully discharges. If this occurs, charge the built-in battery by connecting to the supplied AC adaptor for 24 hours.

Turning the date and time display on/off

- To switch the date and time display on or off, access the menu and change the Date/Time Display mode. ➥page 85

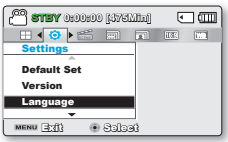
Simple setting of the clock by time difference

- You can easily set the clock to the local time by setting a time difference when using your camcorder abroad. Select "Time Zone" on the menu, then set the time difference. ➥page 82

SELECTING THE LANGUAGES

You can select the language that appears on the menu screen. The language setting is retained when the camcorder is powered off.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings."**
2. Move the **Control** joystick (▲/▼) to select **"Language,"** and then press the **OK** button.
3. Move the **Control** joystick (▲/▼) to select the desired OSD language, and then press the **OK** button.
4. Press the **MENU** button to exit the menu.
   - The OSD language is refreshed in the selected language.



Submenu items

"English"	→	"한국어"	→	"Français"	→	"Deutsch"	→
"Italiano"	→	"Español"	→	"Português"	→	"Nederlands"	→
"Svenska"	→	"Suomi"	→	"Norsk"	→	"Dansk"	→
"Polski"	→	"Čeština"	→	"Slovensky"	→	"Magyar"	→
"Română"	→	"Български"	→	"Ελληνικά"	→	"српски"	→
"Hrvatski"	→	"Українська"	→	"Русский"	→	"中文"	→
"日本語"	→	"ไทย"	→	"Türkçe"	→	" ایرانی "	→
" العربية "	→	"עברית"					

- **"Language"** options may be changed without prior notice.
- Selected language is retained even without the battery pack or AC power adaptor.
- The date and time format may change depending on the language you selected.

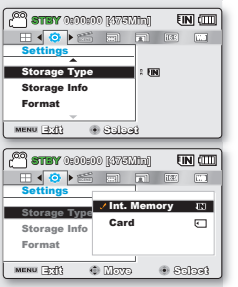
about the storage media

SELECTING THE STORAGE MEDIA (SMX-F43/F44 only)

- You can record on the built-in memory or a memory card, so the desired storage media needs to be selected before starting recording or playback.
- You can use SD and SDHC cards on your camcorder.
  (Some cards are not compatible depending on a memory card manufacturer and memory card type.)
- Before inserting or ejecting a memory card, turn the camcorder off.

Selecting the storage media

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings."**
2. Move the **Control** joystick (▲/▼) to select **"Storage Type,"** then press the **OK** button.
3. Move the **Control** joystick (▲/▼) to select **"Int. Memory"** or **"Card,"** then press the **OK** button.
   - **"Int. Memory"** : When using the built-in memory.
   - **"Card"** : When using a memory card.
4. Press the **MENU** button to exit.



Using the built-in memory (SMX-F43/F44 only)

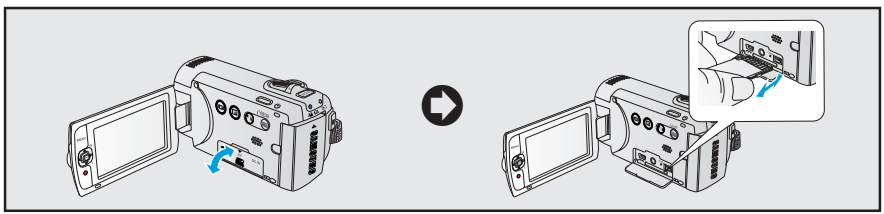
- This camcorder has an embedded 8GB(SMX-F43 only) or 16GB(SMX-F44 only) memory.

Using a memory card (not supplied)

- This camcorder has a card slot for access to SD and SDHC (Secure Digital High Capacity).
- You can use SD and SDHC cards on your camcorder.
  - Some cards are not compatible depending on a memory card manufacturer and memory card type.

- Never format the built-in memory or memory card using a PC.
- If you insert a memory card when the camcorder is on, the pop-up message will prompt you automatically to select the storage type. (SMX-F43/F44 only)
- If there is no memory card inserted, only the built-in memory will be available. (SMX-F43/F44only)
- Do not eject a memory card while it is being used in the camcorder. The memory card and its data may be damaged.
- Do not remove the power (battery pack or AC power adaptor) when using storage media to record, playback, format, delete, etc. The storage media and its data may be damaged.

INSERTING AND REMOVING A MEMORY CARD (NOT SUPPLIED)



To insert a memory card

1. Turn the camcorder off.
2. Open the memory card/jack cover as shown in the diagram.
3. Insert a memory card into the memory card slot until it softly clicks in the direction of the arrow shown in the diagram.
4. Close the cover.

To eject a memory card

1. Turn the camcorder off.
2. Open the memory card/jack cover as shown in the diagram.
3. Slightly push the memory card inwards to pop it out.
4. Pull the memory card out of the memory card slot and close the cover.

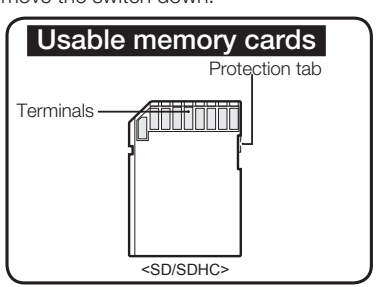
- If a memory card is not inserted correctly, the camcorder may fail to operate normally or the memory card slot may be damaged.
- Be careful when ejecting a memory card. If the memory card is pushed hard, it may pop out suddenly.

Your camcorder supports only SD(Secure Digital) and SDHC(Secure Digital High Capacity) cards. Compatibility with this camcorder may vary depending on the card manufacturer and type.

SELECTING A SUITABLE MEMORY CARD

Compatible memory cards

- This camcorder can be used with SD (Secure Digital) and SDHC (Secure Digital High Capacity) cards. It is recommended to use an SDHC (Secure Digital High Capacity) card. SD cards up to 2GB are supported with this camcorder. Normal operation is not guaranteed with SD cards bigger than 2GB.
- MMC (Multi Media Card) and MMC Plus are not supported.
- Compatible memory card capacity: SD 512MB ~ 2GB, SDHC 4 ~ 32GB
- Use compatible memory card brands. Others are not guaranteed to work. Check the compatibility when buying a memory card.
  - SDHC/SD cards: Panasonic, SanDisk, TOSHIBA
- To record videos, use a memory card supporting at least 2MB/s.
- SD/SDHC memory cards have a mechanical write-protection switch. Setting the switch prevents accidental erasure of files recorded on the card. To enable writing, move the switch up in the direction of the terminals. To set write protection, move the switch down.



SDHC (Secure Digital High Capacity) cards

- SDHC (Secure Digital High Capacity) memory card
  - An SDHC card is a higher version (Ver.2.00) of SD card and supports capacity above 2GB.
  - Cannot be used with current SD enabled host devices.

Common cautions for memory cards

- Damaged data may not be recovered. It is recommended you make a back-up of important data separately on the hard disk of your PC.
- Turning the power off or removing a memory card during an operation such as formatting, deleting, recording, and playback may cause data loss.
- After you modify the name of a file or folder stored in the memory card using your PC, your camcorder may not recognize the modified file.

Handling a memory card

- It is recommended that you power off before inserting or removing the memory card to avoid data loss.
- It is not guaranteed that you can use a memory card formatted by other devices. Be sure to format your memory card using this camcorder.
- You have to format newly-purchased memory cards, memory cards with data that your camcorder cannot recognize or has been saved by other devices. Note that formatting erases all data on the memory card.

- If you cannot use a memory card that has been used with another device, format it with your camcorder. Note that formatting erases all information on the memory card.
- A memory card has a certain life span. If you cannot record new data, you have to purchase a new memory card.
- A memory card is a precision electronic media. Do not bend it, drop it, or cause a strong impact.
- Do not place foreign substances on the memory card terminals. Use a soft dry cloth to clean the terminals if required.
- Do not paste anything other than the label provided with the card on the label pasting section.
- Be careful to keep the memory card out of the reach of children, who might swallow it.

Notes on use

- Samsung is not responsible for data loss due to misuse.
- We recommend using a memory card case to avoid losing data from moving and static electricity.
- After a period of use, the memory card may get warm. This is normal and is not a malfunction.

The camcorder supports SD and SDHC memory cards for data storage preference!

The data storage speed may differ, according to the manufacturer and production system.

- SLC (single level cell) system: faster write speed enabled.
- MLC (multi level cell) system: only lower write speed is supported.
  For best results, we recommend using a memory card that supports faster write speed.
  Using a lower write speed memory card for recording video may cause difficulties when storing.
  You may even lose your video data during the recording.
  In an attempt to preserve any bit of the recorded video, the camcorder forcibly stores the movie on the memory card and displays a warning:
  “Low speed card. Please record a lower resolution.”
  If you are unavoidably using a low speed memory card, resolution and quality of the recording may be lower than the set value. ➥pages 47~48
  The higher the resolution and quality, the more memory will be used.

about the storage media

Recordable time available for video

Media		Built-in memory*		Memory Card					
Capacity		8GB	16GB	1GB	2GB	4GB	8GB	16GB	32GB
TV Super Fine	720x480(60i)	190min	380min.	23min	47min	95min	190min	380min	760min
TV Fine	720x480(60i)	240min	480min.	30min	60min	120min	240min	480min	960min
TV Normal	720x480(60i)	310min	620min.	38min	77min	155min	310min	620min	1,240min
Web Fine	640x480(30p)	240min	480min.	30min	60min	120min	240min	480min	960min
Web Normal	640x480(30p)	310min	620min.	38min	77min	155min	310min	620min	1,240min

(Unit: Approximate minutes of recording)

Recordable number of photos

Media		Built-in memory*		Memory Card					
Capacity		8GB	16GB	1GB	2GB	4GB	8GB	16GB	32GB
Mode	Resolution								
4:3	800x600	9,999	9,999	1,920	3,840	7,680	9,999	9,999	9,999
	1600x1200	6,080	9,999	760	1,530	3,040	6,080	9,999	9,999
16:9	848x480	9,999	9,999	1,920	3,840	7,680	9,999	9,999	9,999
	1696x960	6,080	9,999	760	1,530	3,040	6,080	9,999	9,999

(Unit: Approximate minutes of images)

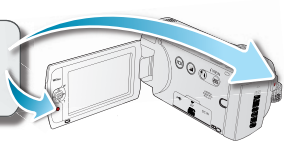
- The figures in the table may differ depending on the actual recording conditions and subject.
- The higher the quality and resolution, the more memory is used.
- Lower resolution and quality increases the recording time, but the image quality may suffer.
- The bit rate automatically adjusts to the recording image. Accordingly, the recording time may vary.
- Memory cards bigger than 32GB may not operate normally.
- The recording length of a Time Lapse REC may vary depending on settings.
- A memory card that is used to store a video can cause un-writable areas, which may result in reduced recording time and free memory space.
- The maximum size of a video (H.264/AVC) file that can be recorded at one time is 1.8GB.
- The camcorder can store up to 9,999 files of videos and photos in one memory card.
- Video (or photo) images recorded by other equipment are not playable on this camcorder.
- Items marked with * are available only with 8GB(SMX-F43 only), 16GB(SMX-F44 only) models.
- For recording, the 16:9 aspect ratio will use more memory than the 4:3 aspect ratio. You can select the desired LCD display aspect ratio for recording or playback (16:9 Wide/4:3 aspect ratio). ➥page 49

basic recording

Basic procedures to record a video or photo image are described below and on the following pages.

RECORDING VIDEOS

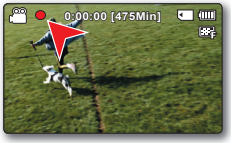
This camcorder features two **Recording start/stop** buttons. One is on the rear side of the camcorder, the other is on the LCD screen. Select the one that works best for you.



PRECHECK!

- Open the LCD screen and press the **Power** (⏻) button to turn on the camcorder.
- Set the appropriate storage media. ➥page 30 (SMX-F43/F44 only) (If you want to record on a memory card, insert a memory card.)
- Select the Record (🎥 / 📷) mode by pressing the **MODE** button. ➥page 24

1. Select a subject to record.
   - Adjust the LCD panel to the best angle for recording.
   - Use the **Zoom** lever or **Zoom** button to adjust the size of the subject. ➥page 39
2. Press the **Recording start/stop** button.
   - The recording (●) indicator appears, and recording starts.
3. To stop recording, press the **Recording start/stop** button again.

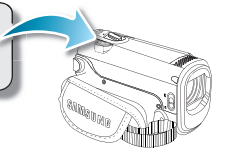


- If power is interrupted or an error occurs during recording, the video may not be recorded/edited.
- Samsung is not responsible for any damage occurred by a failure of normal recording or playback operation because of memory card error.
- Note that damaged data cannot be recovered.

- For on-screen information display. ➥pages 12~13
- Eject the battery pack when you have finished recording to prevent unnecessary battery power consumption.
- For various functions available when you record videos. ➥page 45
- During recording, some button operations are unavailable. (**MODE** button, **MENU** button, etc.)
- Sound is recorded from the internal stereo microphone on the top-front of the camcorder. Take care that this microphone is not blocked.
- Before recording an important video, make sure to test the recording function to check if there is any problem with the audio and video recording.
- Do not operate the Power (⏻) button or remove a memory card while accessing the storage media. Doing so may damage the storage media or the data on the storage media.
- LCD screen brightness and color can be adjusted from the menu. Adjusting the brightness or color of the LCD screen does not affect the image to be recorded. ➥page 86
- **This camcorder provides one combined video and photo record mode. You can easily record videos or photos in the same mode without having to change it.**
- You cannot use a locked memory card for recording. You will see a message saying recording is disabled due to the lock.
- You can switch the play mode to the record mode by pressing the Recording start/stop or **MODE** button.
- If the power cable/battery is disconnected or recording is disabled during recording, the system is switched to the data recovery mode. While data is being recovered, no other function is enabled. After data recovery, the system will be switched to the STBY mode. When the recording time is short, the data recovery might fail.

TAKING PHOTOS

You can take photos and store them on the storage media. Set the desired resolution before recording. ➥ page 48



PRECHECK!

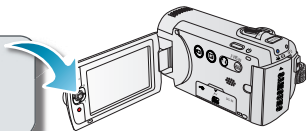
- Open the LCD screen and press the **Power** (⏻) button on the camcorder.
- Set the appropriate storage media. ➥page 30 (SMX-F43/F44 only) (If you want to record on a memory card, insert a memory card.)
- Select the Record (🎥 / 📷) mode by pressing the **MODE** button. ➥page 24

1. Select a subject to record.
   - Adjust the LCD panel to the best angle for capturing.
   - Use the **Zoom** lever or **Zoom** button to adjust the size of the subject. ➥page 39
2. Adjust the subject at the center of the LCD screen.
3. Fully press the **PHOTO** button.
   - The shutter sound is heard. (when "**Shutter Sound: On**" is set).
   - To continue capturing, wait until the current photo is completely saved on the storage media.

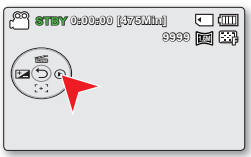
- Recordable number of photos varies depending on the photo size and quality. ➥page 34
- Audio is not recorded when taking photos.
- If focusing is difficult, use the manual focus function. ➥page 58
- Do not turn off the camcorder or remove the memory card when taking photos as it may damage the storage media or data.
- For the on-screen display information, see pages 12~13.
- Adjust brightness and contrast of the LCD screen using menu items. Doing so does not affect the recorded image. ➥page 86
- Photo files conform to the DCF (Design rule for Camera File system) standard, established by JEITA (Japan Electronics and Information Technology Industries Association.)
- Available photo resolutions are 1696X960 and 848X480 in 16:9 aspect ratio, while 1600X1200 and 800X600 are available in 4:3 aspect ratio. (To switch to 4:3, release 16:9 mode.) ➥page 49
- **This camcorder provides one combined video and photo record mode. You can easily record videos or photos in the same mode without having to change it.**
- You can switch the play mode to the record mode by pressing the **PHOTO** or **MODE** button.
- Using the Quick View function, you can view the most recently recorded video or photo image right after your recording. ➥page 37

QUICK VIEW FUNCTION IN THE RECORD MODE

Using the Quick View function, you can view the most recently recorded video or photo image right after your recording.



1. Press the **OK** button in STBY mode right after your recording.
   - Shortcut menu (OK guide) is displayed on the LCD screen.
2. Move the **Control** joystick (►) to view the most recent video (or photo) you have recorded.
   - After the Quick view is finished, your camcorder switches back to the STBY mode.
   - During the Quick view, use the **Control** joystick (▲/◄/►/**OK**) for playback search or to delete the current file.

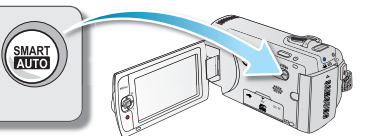


The Quick View function is not available in the following conditions: (The Quick View icon is dimmed in the Shortcut menu.)

- If the mode has been changed after the recording or the camcorder is connected with the USB cable.
- If the camcorder has been turned off and on again after the recording.
- In the **SMART AUTO** mode.
- After using the Quick View function.

RECORDING WITH EASE FOR BEGINNERS (SMART AUTO MODE)

User-friendly **SMART AUTO** optimises your camcorder to the recording conditions automatically, providing beginners with the best performance.



PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Touch the **SMART AUTO** ( ) touch button.
   - The **SMART AUTO** ( ) and **Anti-Shake(HDIS)** ( ) icons appear on the screen at the same time.
2. Adjust the subject on the LCD screen.
   - The camcorder detects the subject and automatically selects a type of scene.
   - According to the detected type of scene, the corresponding icon will appear.
     - : Appears when recording landscape.
     - : Appears when recording with a very bright background.
     - : Appears when recording a night scene.
     - : Appears when recording a portrait outdoors at night.
     - : Appears when recording indoors.
     - : Appears when recording a portrait.
     - : Appears when recording a close-up.
3. Press the **Recording start/stop** button or **PHOTO** button. ➥pages 35~36
   - To record videos, press the **Recording start/stop** button. To take photos, press the **PHOTO** button.
4. To cancel SMART AUTO mode, touch the **SMART AUTO** ( ) touch button again.
   - The **SMART AUTO**( ) and **Anti-Shake(HDIS)** ( ) icons disappear from the screen.

According to the detected type of scene, the corresponding icon will appear.

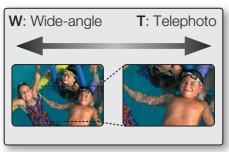
- **Unavailable buttons during SMART AUTO operation:**
  MENU button / **OK** button/ etc. Most settings are automatically adjusted in SMART AUTO mode.
  To set or adjust functions on your own, release the SMART AUTO mode first.
- SMART AUTO must be set before recording.
- When there is no detected scene, the ( ) icon appears.
- The camcorder may not detect the Portrait mode when recording a face, depending on a position of the face or brightness.
- Depending on conditions such as lighting, shake of the camcorder, or distance to the subject, the same scene mode could be detected differently.
- When recording more than two scenes at the same time, SMART AUTO icon priority order is showed as below:
  Night Portrait > Portrait > Macro > White > Landscape > Night > Indoor
  For example,
  a) If Portrait and Indoor occur at the same time, Portrait is activated.
  b) If Night Portrait and Night occur at the same time, Night Portrait is activated.

ZOOMING

W
T
Use the zoom function for close-up or wide-angle recording. This camcorder allows you to record using 52x optical power zoom, 65x Intelli-zoom and 2200x digital zoom.
W
OK
T

To zoom in

Slide the Zoom lever towards T (telephoto).
(Or move the **Control** joystick (▼) on the LCD panel.)



To zoom out

Slide the Zoom lever towards W (wide-angle).
(Or move the **Control** joystick (▲) on the LCD panel.)

- You can zoom with the zoom lever or the **Control** (W/T) button on the LCD panel.
- Zoom magnification over 65x is done through digital image processing, and is therefore called digital zoom. Digital zooming is possible up to 2200x. Set **"Zoom Type"** to **"Digital Zoom."** ➥page 63
- The minimum possible distance between the camcorder and subject while maintaining sharp focus is about 0.39 inch (1cm) for wide-angle and about 39.4 inches (1m) for telephoto.
- Optical zoom preserves image quality, but during digital zoom the image quality may suffer.
- Fast zooming or zooming in subject at a far distance may produce slow focusing. If this occurs, use **"Manual Focus."** ➥page 58
- It is recommended to use **Anti-Shake (HDIS)** with handheld recording if the subject is zoomed in and enlarged.
- Frequent use of the zoom function consumes more power.
- Zooming during a recording may record operation sound of the zoom lever or zoom button.
- When using the zoom function, its speed can be decreased by slowly moving the Zoom (W/T) lever. A fast moving increases the zoom speed. However, the Zoom (W/T) button on the display cannot adjust the zoom speed.

basic playback

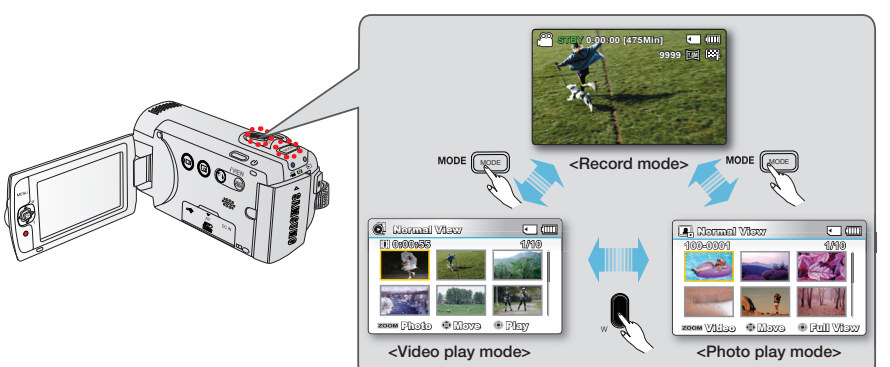
- You can view recorded videos and photos in thumbnail index view and play them in various ways. In the thumbnail index view, you can directly select and display a desired image without using fast forwarding and rewinding.
- **This camcorder provides one combined video and photo record mode. You can easily record videos or photos in the same mode without having to change it.**

CHANGING THE PLAYBACK MODE

- Pressing the **MODE** button changes the operation mode to Record (/) and Play ( ) mode in turn.
- The recorded videos or photos are displayed in thumbnail index view. According to the previous record mode, recordings will be stored in videos or photos thumbnail index view, respectively. When switching to Play mode after recording a video, the video's thumbnail index view appears. When switching to Play mode after recording a photo, the photo's thumbnail index view appears.

How to change between video and photo thumbnail view.

- You can simply switch between video and photo thumbnail view using the zoom lever.

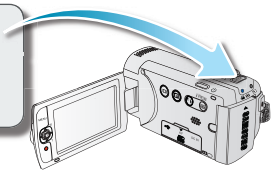


Multi View Option provides sorting thumbnails of recorded videos and photos by different display options (recording, recorded date). ➥page 68

PLAYING BACK VIDEOS

You can preview recorded videos in a thumbnail index view. Find your desired video quickly, and playback directly.

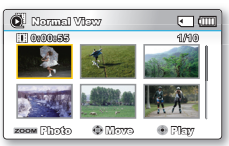
MODE



PRECHECK!

- This function works only in Video Play ( ) mode.
- You can find a desired video image quickly using the thumbnail index view.

1. Open the LCD screen and press the **Power** ( ) button to turn on the camcorder. ➥page 23
   - Set the appropriate storage media. (SMX-F43/F44 only) ➥page 30 (If you want to playback images on a memory card, insert a memory card.)
2. Press the **MODE** button to select the Play mode.
   - The thumbnail index view appears. The thumbnail highlight is on the latest created or played file.
3. Select the Video thumbnail index view screen.
   - You can simply switch between video and photo thumbnail view using the zoom lever.
   - Playing time of the selected file and the thumbnail showing the video playback will appear on the screen.
4. Use the **Control** joystick (▲/▼/◀/▶) to select the desired videos, and then press the **OK** button.
   - If you set the Date/Time Display before video playback, the date/time appears briefly for about a second and then the selected video starts playing.
   - Shortcut menu for playback will be displayed for 3 seconds.
   - The selected videos are played according to the Play Option setting. ➥page 69
   - To stop playback and return to the thumbnail index view, move the zoom lever.



- Loading time of a video to be played back may become slow depending on the video resolution.
- Video files may not playback on the camcorder in the following cases:
  - Video files edited or renamed on a PC
  - Video files recorded by devices other than the camcorder
  - Video file formats that are supported
- The built-in speaker automatically turns off when the Audio/Video cable is connected to the camcorder. (When connected to external devices, volume adjustment should be done on the connected external device.)
- You can playback recorded video files on a TV or a PC. ➥pages 94,100
- You can upload recorded videos or photos YouTube, Flickr, and Facebook using Intelli-studio. ➥page 101
- For various functions available during playback, see **"playback options."** ➥pages 67~78
- Use the Quick View function if you want to preview the last recorded video or photos. ➥page 37

basic playback

Various playback operations

Still playback (pause) (▶/⏸)

- Press the **OK** button during playback.
  - To resume normal playback, press the **OK** button again.

Search playback (◀◀ / ▶▶)

- During playback, move and hold the **Control** joystick (▶) for forward search, or to the left for reverse search.
- Moving the **Control** joystick to (◀/▶) repeatedly increases the search speed for each direction.
  - RPS (Reverse Playback Search) rate: x2 → x4 → x8 → x16
  - FPS (Forward Playback Search) rate: x2 → x4 → x8 → x16
- To resume normal playback, press the **OK** button.

Skip playback (⏮/ ⏭)

- During playback, move the **Control** joystick (▶) to locate the start point of the next file. Moving the **Control** joystick (▶) repeatedly skips files in the forward direction.
- During playback, move the **Control** joystick (◀) to locate the start point of the current file. Moving the **Control** joystick (◀) repeatedly skips files in the reverse direction.
- Move the **Control** joystick(◀) within 3 seconds from the start point of the current file to skip back to the previous file.

Frame-by-frame playback (◀II/ II▶)

- In pause mode, use the **Control** joystick (◀/▶) to play the video forward or backward one frame at a time.
  - To resume normal playback, press the **OK** button.

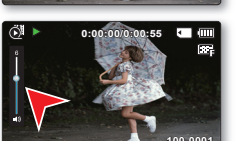
Slow motion playback (◀I/ I▶)

- During pause, holding the **Control** joystick (◀/▶) reduces the playback speed.
- During slow motion playback, moving the **Control** joystick (◀/▶) changes the playback speed.
  - Forward slow playback rate: x1/2 → x1/4 → x1/8 → x1/16
  - Reverse slow playback rate: x1/2 → x1/4 → x1/8 → x1/16
  - To resume normal playback, press the OK button.
- Recorded sound is not heard in slow motion playback.

To adjust the volume

Move the **Control** joystick (▲/▼) to increase or decrease the volume.

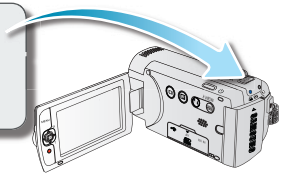
- The volume bar disappears after 3~4 seconds.
- You can hear the recorded sound from the built-in speaker.
- The level can be set to anywhere between 0 and 10.
  (If you close the LCD screen while playing, you will not hear the sound from the speaker.)



VIEWING PHOTOS

You can view recorded photos by using various playback functions.

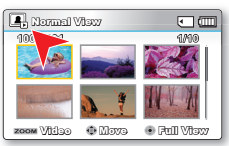
MODE



PRECHECK!

- This function works only in Photo Play ( ) mode.
- You can find and view desired photos quickly using the thumbnail index view.

1. Open the LCD screen and press the **Power** ( ) button to turn on the camcorder. ➥page 23
   - Set the appropriate storage media. (SMX-F43/F44 only) ➥page 30 (If you want to playback images on a memory card, insert a memory card.)
2. Press the **MODE** button to select the Play mode.
   - The thumbnail index view appears. The thumbnail highlight is on the latest created or played file.
3. Select the Photo thumbnail index view screen.
   - You can simply switch between video and photo thumbnail view using the zoom lever.



4. Use the **Control** joystick (▲/▼/◀/▶) to select the desired photos, and then press the **OK** button.
   - Shortcut menu for playback will be displayed for a while.
   - To view the previous/next photo, move the **Control** joystick (◀/▶).
   - To return to the thumbnail index view, move the zoom lever.

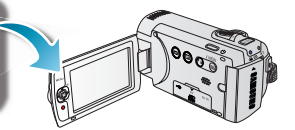
- Do not power off or eject the memory card during photo playback. Doing so may damage the recorded data.
- Your camcorder may not playback the following photo files normally;
  - A photo with its file name changed on a PC.
  - A photo recorded on other devices.
  - A photo with a file format not supported on this camcorder (does not conform to DCF standards).

- Loading time may vary depending on the size and quality of the selected photo.
- The Quick View function is used if you want to preview the last recorded photos. ➥page 37

recording options

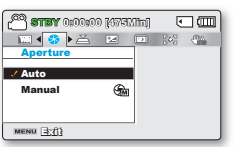
CHANGING THE MENU SETTINGS

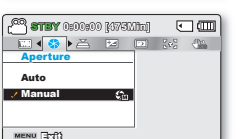
You can change the menu settings to customize your camcorder. This chapter uses **"Aperture"** function in the Record mode as an example. .



Using the MENU button

1. Open the LCD screen and press the **Power** (⏻) button to turn on the camcorder.
2. Press the **MODE** button to select the Record (🎥 / 📷) mode**.**
3. Press the **MENU** button.
   - The menu screen appears.
4. Move the **Control** joystick(◀/▶) to select **"Aperture."**
   - To return to the normal screen, press the **MENU** button.
5. Move the **Control** joystick(▲/▼/**OK**) to select the desired submenu item.
   - Depending on the mode selected, some menu items may not be available to select and change.
   - Adjust the value of the selected menu item. For example, adjust the Aperture value by moving the **Control** joystick (◀/▶/**OK**).
   - When you finish making settings, press the **MENU** button to exit.





- While making the menu setting, some menu items are dimmed and cannot be selected at the same time. For details on the menus that are not available, refer to the Troubleshooting chapter. ➥ page 113
- From the next page, basic instruction is written to help users to set each menu easily. Instructions may differ according to the selected menu item.
- You can also access the shortcut menu using the **OK** button. ➥pages 26~27

MENU ITEMS

- Accessible items in menu vary depending on the operating mode.
- For operation details, see the corresponding page.

Recording menu items

● : Possible

Items	Record (/) mode	Default value	Page
iSCENE	●	Auto	46
Video Resolution	●	TV Fine	47
Photo Resolution	●	1696x960 (16:9)	48
16:9 Wide	●	On	49
White Balance	●	Auto	50
Aperture	●	Auto	52
Shutter Speed	●	Auto	53
EV	●	0	55
C.Nite	●	Off	56
Focus	●	Auto	57
Anti-Shake(HDIS)	●	Off	59
Digital Effect	●	Off	60
Fader	●	Off	61
Wind Cut	●	Off	62
Zoom Type	●	Intelli-Zoom	63
Time Lapse REC	●	Off	64
Guideline	●	Off	66
Settings	●	-	79

recording options

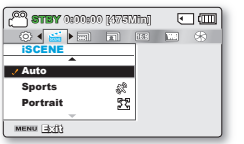
iSCENE

This camcorder automatically sets the shutter speed and aperture according to the subject and brightness for optimum recording. You can also specify one of various modes depending on subject conditions, recording environment or purpose of filming.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

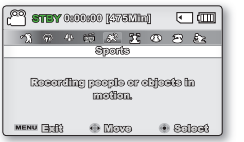
1. Press the **MENU** button → **Control** joystick (◄/►) → **“iSCENE.”**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

items	contents	on-screen display
“Auto”	Use this setting for the regular recording conditions. The shutter speed and the aperture values are automatically adjusted for optimum recording.	-
“Sports”	When recording rapidly moving subjects such as sports games.	
“Portrait”	When recording a portrait image, use this setting to express the natural skin tone.	
“Spotlight”	When recording subjects under strong light. For example, stage spotlights in theaters.	
“Beach”	Where sunlight is intense like a beach.	
“Snow”	Where reflection of light is intense like a snowfield.	
“High Speed”	Reduces blurring objects in rapid motion.	
“Food”	Recording close-up objects in high saturation.	
“Waterfall”	Recording a waterfall or fountain.	

- The iSCENE also can be set in the shortcut menu. ➥page 26~27



Video Resolution

You can select the resolution of a video to be recorded. This camcorder can record in **"TV Super Fine," "TV Fine," "TV Normal," "Web Fine"** and **"Web Normal"** modes. The **"TV Fine"** mode is set as the factory default.

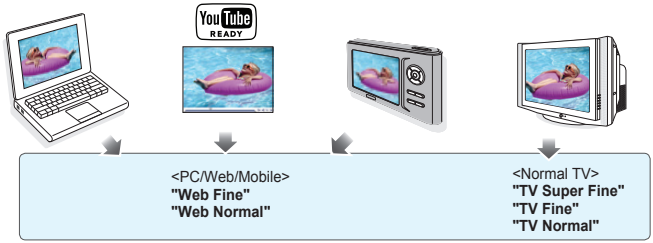
PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Video Resolution."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

Submenu Items

items	contents	on-screen display
"TV Super Fine"	Videos recorded in 720x480(60i) resolution at super-fine image quality.	
"TV Fine"	Videos recorded in 720x480(60i) resolution at fine image quality.	
"TV Normal"	Videos recorded in 720x480(60i) resolution at normal image quality.	
"Web Fine"	Videos recorded in 640x480 (30p) resolution at fine image quality. Supports viewing with the optimal resolution on a PC.	
"Web Normal"	Videos recorded in the 640x480 (30p) resolution at normal image quality. Supports viewing with the optimal resolution on a PC.	



- You can record a scene at five resolution levels: **"TV Super Fine," "TV Fine," "TV Normal," "Web Fine"** or **"Web Normal."** However, the better the resolution is, the more memory is used.
- The recording times depend on the resolution of a video to be recorded. ➥page 34
- Video resolution settings of **"Web Fine"** and **"Web Normal"** record movie in 4:3 aspect ratio even when you set it to 16:9.

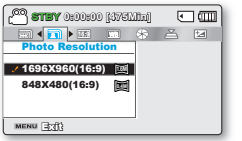
Photo Resolution

You can select the quality of photo images to be recorded.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **“Photo Resolution.”**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

items	contents	on-screen display
“1696x960 (16:9)”	Records in 1696x960 resolution.	1.6M
“848x480 (16:9)”	Records in 848x480 resolution.	0.4M
“1600x1200 (4:3)”	Records in 1600x1200 resolution.	2M
“800x600 (4:3)”	Records in 800x600 resolution.	SVGA

- Photos recorded by your camcorder may not be displayed on another device if it does not support high resolution.
- For photo development, the higher the resolution, the finer the image quality.
- The number of recordable images varies depending on the recording environment. ➥page 34
- High resolution images occupy more memory space than low resolution images. If a higher resolution is selected, there is less space to store photos in the memory.
- The submenu items of Photo Resolution vary depending on the selection of the 16:9 Wide function.

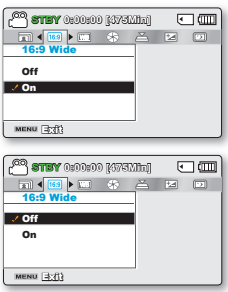
16:9 Wide

You can select the desired LCD display aspect ratio for recording or playback (16:9 Wide/4:3 aspect ratio).

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"16:9 Wide."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu items

items	contents	on-screen display
"Off"	Disables the function. Displays the image in 4:3 aspect ratio. Select to use the standard display aspect ratio of 4:3 on the screen.	-
"On"	Recording and viewing of 16:9 aspect ratio.	-

- Please set the aspect ratio before recording. The default setting is **"16:9 Wide : On."**
- Video resolution settings of **"Web Fine"** and **"Web Normal"** record movie in 4:3 aspect ratio even when you set it to 16:9.

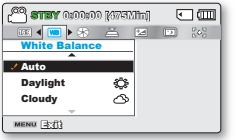
White Balance

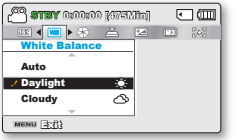
This camcorder automatically adjusts the color of the subject. You can record in natural colors depending on the subject and lighting conditions.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◀/▶) → **“White Balance.”**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



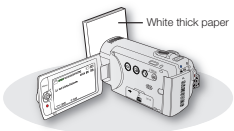


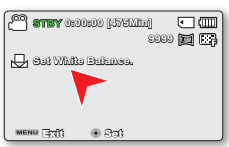
Submenu items

items	contents	on-screen display
“Auto”	Controls the white balance automatically depending on the recording conditions.	-
“Daylight”	Controls the white balance according to the outdoor lighting.	
“Cloudy”	When recording in the shade or cloudy weather.	
“Fluorescent”	When recording under white fluorescent lights.	
“Tungsten”	When recording under halogen lamps and incandescent lights.	
“Custom WB”	You can manually adjust the white balance to match the light source or situation.	

To set the white balance manually

1. Select **“Custom WB.”**
   - The indicator (🖧) and the message **“Set White Balance.”** are displayed.
2. Frame a white object such as a piece of paper so that it fills the screen. Use an object that is not transparent.
   - If the object that fills the screen is not focused, correct the focus using **“Manual Focus.”** ➥page 58
3. Press the **OK** button.
   - The white balance setting will be applied and indicator (🖧) is displayed.
4. Press the **MENU** button to exit the menu.





Understanding White Balance:

White balance (WB) is the process of removing unrealistic color casts, so that objects which appear white are rendered white in your photo. Proper white balance has to take into account the “color temperature” of a light source, which refers to the relative warmth or coolness of white light.

- A subject can be recorded under various types of lighting conditions indoors (natural, fluorescent, candlelight, etc.). Because the color temperature is different depending on the light source, the subject tint will differ depending on the white balance settings. Use this function for a more natural result.
- When setting the white balance manually, the subject must be white, otherwise, your camcorder may not detect an appropriate setting value.
- The adjusted setting remains until you set the white balance again.
- During normal outdoor recording, setting to “**Auto**” may provide better results.
- Cancel the digital zoom function for clear and precise setting.
- Reset the white balance if light conditions change.

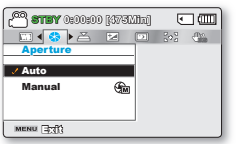
Aperture

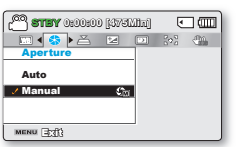
The camcorder adjusts the aperture automatically depending on the subject and recording conditions. You can also manually adjust the Aperture to your preference.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Aperture".**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



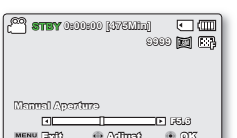


Submenu Items

items	contents	on-screen display
"Auto"	Sets the aperture value automatically.	-
"Manual"	Sets the aperture value manually.	FX.X

Setting the aperture manually:

1. Select **"Manual."**
2. Adjust the aperture value with the **Control** joystick(◄/►).
   - Confirm your selection by pressing the **OK** button.
   - Exposure value can be set between **"F1.8"** and **"F22."**
   - If you set aperture to manual, the higher the aperture, the darker the recorded picture will be.



Understanding Aperture

The aperture stop of a photographic lens can be adjusted to control the amount of light reaching the film or image sensor.
The aperture value needs to be adjusted in the following cases:

- When shooting against the light or when the background is too bright.
- When shooting on a reflective natural background such as at the beach or when skiing.
- When the background is overly dark (for example, night scenery).

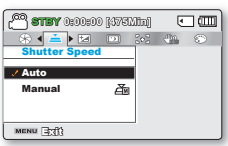
Shutter Speed

The camcorder automatically sets the shutter speed depending on the scene's brightness. You can also manually adjust the shutter speed according to the scene conditions.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Shutter Speed."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

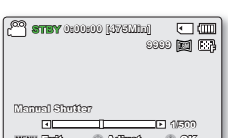


Submenu Items

items	contents	on-screen display
"Auto"	The camcorder automatically sets the appropriate shutter speed value.	-
"Manual"	Shutter speed can be set to 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, or 1/10000.	M 1/XXX

Setting the shutter speed manually:

1. Select **"Manual."**
2. Adjust the shutter speed value with the **Control** joystick(◄/►).
   - Confirm the desired shutter speed setting by pressing the **OK** button.
   - Shutter speed value can be set between 1/60~1/10000.
   - To capture fast movements of the subject, set a fast shutter speed value. To give the impression to the fast movements overall, set a slow shutter speed value.



recording options

Recommended shutter speed when recording:

shutter speed	conditions
1/60	The shutter speed is fixed at 1/60 second. Black bands that usually appear when shooting a TV screen become narrower.
1/100	The shutter speed is fixed at 1/100 second. Indoor sports such as basketball. The flickering that occurs when shooting under a florescent light or mercury-vapor lamp is reduced.
1/250, 1/500, 1/1000	Moving cars, trains or other rapidly moving vehicles such as roller coasters.
1/2000, 1/4000, 1/10000	Outdoor sports such as golf and tennis.

- Do not aim at the sun. Doing so might cause your camcorder to malfunction. Take images of the sun only in low light conditions, such as at dusk.

- The image may not seem smooth when a high shutter speed is selected.
- A higher shutter speed is recommended for shooting a fast moving subject. Note that higher shutter speeds produce a darker image. As the shutter speed increases, the sensor accepts less light.

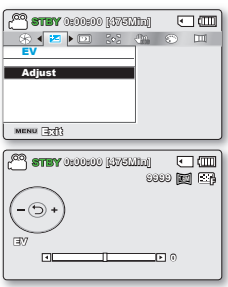
EV (Exposure Value)

The camcorder usually adjusts the exposure automatically.
You can also manually adjust the exposure depending on the recording conditions.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"EV."**
2. Press the **OK** button.
3. Move the **Control** joystick (◄/►) to adjust the exposure while viewing the image on the LCD screen.
   - Exposure value can be set between **"-2.0"** and **"+2.0"**
   - If you set exposure to manual, the higher the exposure, the brighter the recorded picture will be.
4. Confirm your selection by pressing the **OK** button.
   - Exposure value setting will be applied and ( ) indicator and setting value are displayed.
   - To cancel the exposure value manually adjusted, select "0" in the step 3.



Understanding EV(Exposure Value)

Exposure value is the total amount of light allowed to fall on the photographic medium (Image sensor) during the process of taking photos or videos as well.

Manual exposure is recommended in situations:

- When shooting using reverse lighting or when the background is too bright.
- When shooting against a reflective natural background such as at the beach or when skiing.
- When the background is overly dark or the subject is bright.

- The exposure also can be set in the shortcut menu. ➥page 26
- The shutter speed also varies automatically depending on the EV value.

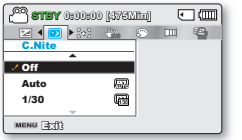
C.Nite

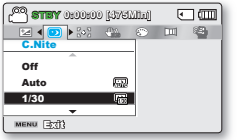
You can adjust the shutter speed when recording a slow moving object, or record a brighter image in dark places without a compromise in colors.

PRECHECK!

Select the Record (🎥 / 📷) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"C.Nite."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.





Submenu Items

items	contents	on-screen display
"Off"	Disables the function.	-
"Auto"	The memory camcorder automatically adjusts image brightness.	AUTO
"1/30"	Record a brighter image by extending the low shutter speed range to **"1/30."**	1/30
"1/15"	Record a brighter image by fixing the shutter speed to **"1/15"** in a dark location.	1/15

When using C.Nite, the image takes on a slow motion like effect.In addition, the focus adjusts slowly and white dots may appear on the screen, this is not a defect.

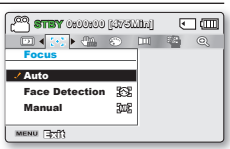
Focus

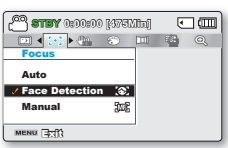
The camcorder usually focuses on a subject automatically (auto focus). When the camcorder is turned on, auto-focus will be always set. You can also manually focus a subject depending on the recording conditions.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Focus."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.





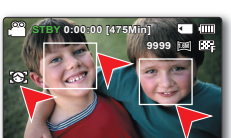
Submenu Items

items	contents	on-screen display
"Auto"	In most situations, it is better to use the automatic focus feature, as it enables you to concentrate on the creative side of your recording.	-
"Face Detection"	Records under the optimal condition by detecting faces automatically.	
"Manual"	Manual focusing may be necessary under certain conditions that make automatic focusing difficult or unreliable.	

Face detection

It detects and recognizes face-like shapes and adjusts focus, color and exposure automatically. Also, it adjusts recording conditions optimised for the face detected.

- Move the **Control** joystick (▲/▼) to select **"Face Detection,"** and then press the **OK** button.
  - Detects a face and shows a frame on it. The detected face image is optimised automatically.



- The Face Detection indicator ( ) and Face Detection frame ( ) are not recorded.
- Framing a person's face while Face Detection is set will adjust focus and exposure to optimal values automatically.
- The Face Detection may not operate depending on the recording conditions. For example, the Face Detection frame may appear when framing a 'face-like' shape, even when the subject is not a person's face. If this occurs, turn off the Face Detection feature.
- The Face Detection feature will not work when framing the side of a person's face or operating while lack of illumination. You must be facing them "head-on" or occupying enough illumination.

Focusing manually during recording:

This camcorder automatically focuses a subject from close-up to infinity. However, the correct focus may not be obtained depending on the recording conditions. In this case, use the manual focus mode.

1. Move the **Control** joystick (▲/▼) to select **"Manual Focus."**
   - The manual focus adjustment indicator appears.
2. Move the **Control** joystick (◀/▶) to select the desired indicator to adjust focus, then press the **OK** button.
   - The manual focus setting will be applied and the (MF) indicator is displayed.

Focusing on a nearer subject

To focus on a nearer subject, move the **Control** joystick (◀).

Focusing on a further subject

To focus on a further subject, move the **Control** joystick (▶).

< Nearer subject > < Further subject >

- The nearer or further icon (/) appears between the indicators when focus adjustment reaches the end.
- The adjusted value is applied right after moving the **Control** joystick (◀/▶) to adjust the focus.

Manual focus is recommended in the following situations :

- The subject is dark
- When the background is too bright
- Subject through a window that is stained or wet
- Subject with dense horizontal or sloping stripes
- Distant subject behind a nearby wire fence
- Walls, atmosphere and other low-contrast subject
- Emitting strong light or reflecting subject
- Focusing on a subject near the boundary of the frame

- You can easily adjust the focus using the Shortcut menu button. ➥pages 26~27
- Manual focusing focuses on a point in the framed scene while auto focusing focuses on the center area automatically.
- Use the zoom function to catch the desired target before manually adjusting the focus. If you use the zoom function after manual focusing, refocusing is required.
- Before focusing manually, check if the **"Digital Zoom"** is turned off. When **"Zoom Type"** is set to **"Digital Zoom,"** manual focusing will not focus with accuracy. Turn the **"Digital Zoom"** off. ➥page 63

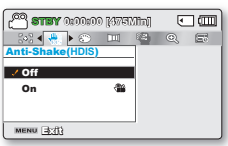
Anti-Shake(HDIS)

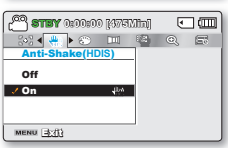
Use the Anti-Shake (HDIS) function to compensate for unstable images caused by shaking movements when holding the camcorder.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Anti-Shake (HDIS)."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.





Submenu Items

items	contents	on-screen display
"Off"	Disable the function.	-
"On"	The Anti-Shake (HDIS) function is enabled to compensate for shaking movements.	

Tip

Use the Anti-Shake function in the following cases:

- Recording when using the zoom extensively
- Recording a close up picture of a small object
- Recording while walking, or moving
- Recording through the window, from inside a vehicle

- The SMART AUTO mode automatically sets the Anti-Shake (HDIS) to On.
- Gross camcorder shake may not be entirely corrected even if "**Anti-Shake (HDIS): On**" is set. Firmly hold the camcorder with both hands.
- When this function is set to "**On,**" the actual movement of the subject and the movement displayed on the screen may be slightly different.
- When recording in dark lighting at high magnification with this function set to "**On,**" may cause after-images. In this case, we recommend using a tripod (not supplied) and turning the "**Anti-Shake (HDIS)**" to "**Off.**"

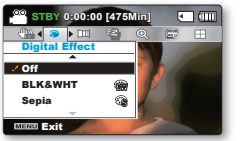
Digital Effect

Using the digital effect function gives your recording a creative look.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Digital Effect."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Examples of 10 digital effect options

Off
Disables the function.

Sepia
This mode gives the images a reddish brown pigment.

Art
Adds artistic effects to an image.

Mosaic
A mosaic overlay appears on an image.

Pastel
This mode applies a pale pastel drawing effect to an image.

Step printing
Technique of recording the image in segments

BLK&WHT
Changes the images into black and white.

Negative
Reverses the colors and the brightness, creating the look of a negative.

Emboss
This mode creates a 3D effect (embossing).

Mirror
This mode cuts the image in half and makes a mirrored image on the other half.

Cosmetic
This mode helps correct facial imperfections.

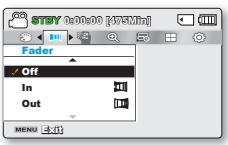
Fader

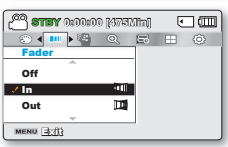
You can give your recording a professional look by using special effects such as fade in at the beginning of a sequence or fade out at the end of a sequence.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

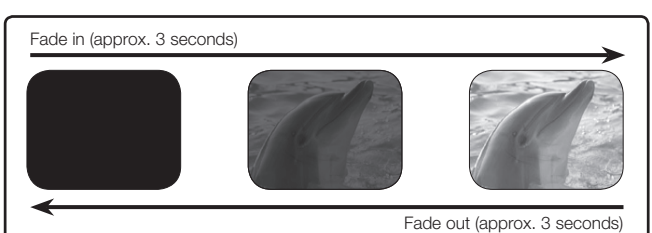
1. Press the **MENU** button → **Control** joystick (◄/►) → **"Fader."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.





Submenu Items

items	contents	on-screen display
"Off"	Disables the function.	-
"In"	As soon as you start recording, it will fade in.	
"Out"	When the recording is done, it will fade out.	
"In-Out"	When you start or stop recording, the fader will be function accordingly.	



This function is disabled after being used one time.

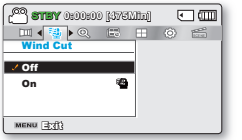
Wind Cut

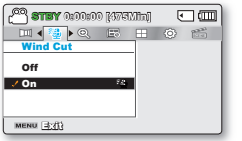
Using the Wind Cut function, you can reduce wind noise when recording sound from the built-in microphone.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Wind Cut."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.





Submenu Items

items	contents	on-screen display
"Off"	Disables the function.	-
"On"	Reduces wind noise when recording sound from the built-in microphone.	

Using the Wind Cut function also removes some low-frequency sound with the wind noise.

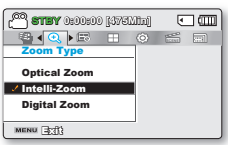
Zoom Type

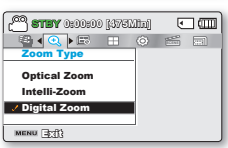
The memory camcorder offers three types of zoom: optical, intelligent and digital zoom when recording videos.

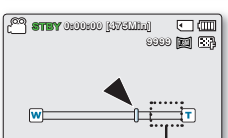
PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

1. Press the **MENU** button → **Control** joystick (◄/►) → **“Zoom Type.”**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.







The right side of the bar shows the digital zooming zone. The zooming zone appears when you move the zoom lever.

Submenu Items

items	contents	on-screen display
“Optical Zoom”	Only optical zoom is available up to 52x.	-
“Intelli-Zoom”	• The camcorder zooms the full width of the image sensor to obtain a larger zoom range without any deterioration in image quality. • Intelli-zoom is available up to 65x.	-
“Digital Zoom”	• When this option is selected, the camcorder will switch automatically to the digital zoom when you zoom in beyond the optical or intelligent zoom range. • Digital zoom is available up to 2200x.	-

- With the digital zoom, the image is digitally processed more than the intelli or optical zoom modes. As a result, the image resolution may deteriorate.
- The image quality may deteriorate depending on how much you zoom in on the subject.
- Maximum zooming may result in lower image quality.
- The zoom range will change depending on the aspect ratio of the video.

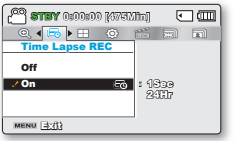
Time Lapse REC

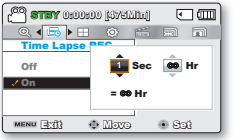
Using the time lapse feature, your camcorder can be programmed to automatically record a number of frames over a period of time or with a certain time interval between each frame. For instance, a camcorder on a tripod (not supplied) in time lapse mode could be set up to shoot frames of a flower opening or a bird building a nest.

PRECHECK!

Select the Record (/) mode by pressing the **MODE** button. ➥page 24

To record in the Time Lapse REC mode, you need to set the recording interval and total recording time in the menu.



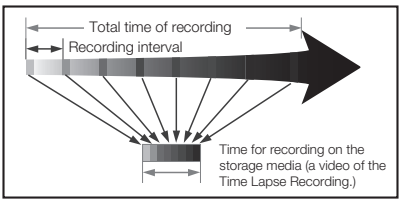


1. Press the **MENU** button → **Control** joystick (◄/►) → **"Time Lapse REC."**
2. Move the **Control** joystick (▲/▼) to select **"On,"** then press the **OK** button.
   - The recording interval and total time for recording items are displayed. ("Sec": seconds, "Hr": hours)
3. Set a desired recording interval (**"Sec"**) with the **Control** joystick (▲/▼).
4. Move to the next setting, **"Hr"** by moving the **Control** joystick (◄/►) and set a desired total recording time in the same way.
5. Press the **OK** button to finish the setting and press the **MENU** button to exit the menu.
6. After setting the Time Lapse REC mode, press the **Recording start/stop** button.
   - The Time Lapse REC starts.
   - Depending on the selected total recording time and recording interval, image frames are captured by each scene.

Submenu items

items	contents	on-screen display
"Off"	Disables the function.	-
"On"	• Interval (**"Sec"**): Image of the subject is captured by set interval. Images are automatically shot a frame at a time at the specified interval and stored in the storage media. 1 → 3 → 5 → 10 → 15 → 30 (Seconds) • REC Limit (**"Hr"**): Total time from start to finish of recording. 24 → 48 → 72 → ∞ (Hours)	

Example of Time Lapse Recording



The Time Lapse Recording function records image frames at the predefined interval over the total recording time to produce a time-lapse video.
For example, the Time Lapse Recording is useful for filming in the following situations:

- Blooming flowers
- A bird building a nest
- Clouds rolling by in the sky

- Time Lapse Recording mode is released once recording has been finished. To start another Time Lapse Recording, repeat steps 1-5.
- 30 captured images compose a video of 1 second length. Since the minimum length of a video to be saved by your camcorder is one second, the interval defines how long the Time Lapse Recording should be taken. For example, if you set the interval to “30 Sec,” Time Lapse Recording should be taken for at least 15 minutes to record a minimum video length of 1 second (30 images).
- Once the Time Lapse Recording finishes recording for its total recording time, it switches to the standby mode.
- Press the **Recording start/stop** button if you want to stop the Time Lapse Recording.
- Audio is not recorded during Time Lapse Recording.
- When a video recording fills up 1.8GB of storage memory, a new recording file is automatically started at that point.
- When the battery charge was exhausted during the Time Lapse recording, it saves recording up to that point and switches to standby mode. After a while, it displays a warning message, then turns off automatically.
- When the memory space of the storage media is insufficient during the Time Lapse Recording, it switches to the standby mode after saving the recording up to its maximum.
- We recommend using the AC power adaptor for a Time Lapse Recording.
- When a time lapse recording starts, a message of “Time Lapse Recording” blinks on the screen and it appeared to be as if the screen is stopped. This is a normal operation; do not remove the power source or memory card from the camcorder.

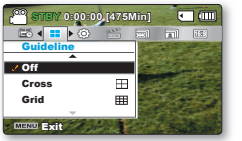
recording options

Guideline

This camcorder provides 3 types of guidelines to help you to set a balanced image composition on the screen.

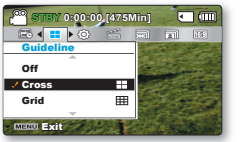
PRECHECK!
Select the Record (/) mode by pressing the **MODE** button. ➥page 24

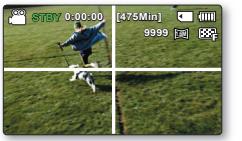
1. Press the **MENU** button → **Control** joystick (◀/▶) → **“Guideline.”**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

items	contents	on-screen display
“Off”	Cancels the guideline function.	-
“Cross”	This is the basic guideline. Use this when focusing a subject in the center.	
“Grid”	Use this when recording a subject in a horizontal or vertical composition, or when shooting with the tele macro function.	
“Safety Zone”	Images beyond the left/right and up/down line do not disappear when edited in the 4:3, and 2.35:1 ratio, respectively.	





- Position a subject at a crosspoint of a guideline to balance the image composition.
- Guidelines are not recorded.

playback options

MENU ITEMS

- Accessible items in the menu vary depending on the operation mode.
- See pages 40~43 for playback information and button operation.
- See pages 67~78 for details on menu items during playback.

Playback menu items

● : Possible
× : Not possible

Items		Video Play ( )	Photo Play ( )	Default value	Page
Multi View Option (Thumbnail index view only)		●	●	Normal View	68
Play Option		●	×	Play All	69
Delete		●	●	-	70
Protect		●	●	-	71
Story-Board Print		●	●	-	72
Copy *		●	●	-	74
Edit	Divide	●	×	-	75
	Combine (Thumbnail index view only)	●	×	-	76
Slide Show		×	●	-	77
Slide Show Option		×	●	-	78
File Info		●	●	-	78
Settings		●	●	-	79

- Items marked with * are available only with models SMX-F43/F44.
- In general, use of functions both in thumbnail display and full image display employs the same method, while their detailed options may be different.

playback options

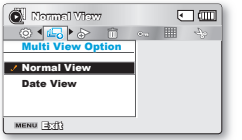
Multi View Option

Multi View Option provides sorting thumbnails of recorded videos or photos by different display options.

PRECHECK!

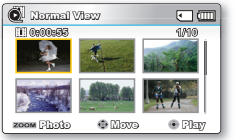
- Press the **MODE** button to select the Play(▶) mode.
- Select the Video or Photo thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Multi View Option."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.

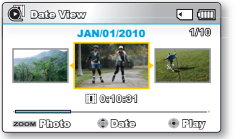


Submenu Items

items	contents	on-screen display
"Normal View"	- The thumbnails of video files are displayed sequentially in the order of recorded time. - The thumbnail of the lastly recorded or played file is highlighted.	-
"Date View"	- Recorded files will be sorted by the recorded date in thumbnails.	-



<Normal View>



<Date View>

3. You can use the **Control** joystick (▲/▼/◀/▶) to select a sorted item.

This function is available only in the thumbnail index view screen.

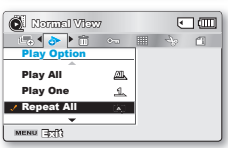
Play Option

You can set a specific playback style according to your preference.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **“Play Option.”**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

items	contents	on-screen display
“Play All”	Plays back from the selected video to the last video.	
“Play One”	The selected video will be played.	
“Repeat All”	All videos will be played repeatedly.	
“Repeat One”	The selected video will be played repeatedly.	

playback options

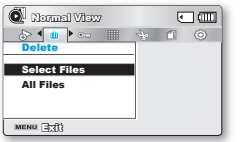
Delete

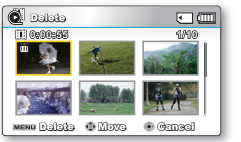
You can erase your recordings one by one, or all at once.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video or Photo thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Delete."**
2. Select an option by moving the **Control** joystick (▲/▼) and then press the **OK** button.





Submenu Items

items	contents	on-screen display
"Select Files"	Deletes individual selected videos (or photos). - To delete individual videos (or photos), select the desired videos (or photos) by pressing the **OK** button, then press the **MENU** button to delete. - The indicator (🗑) is displayed on the selected videos (or photos). - Pressing the **OK** button toggles the selection and release.	-
"All Files"	Deletes all videos (or photos).	-

3. The pop-up selection menu will appear depending on the selected menu item. In this case, select the desired item with the **Control** joystick (◀/▶) and the **OK** button.
   - The selected file is deleted.

- A deleted file cannot be restored.
- Do not remove the AC power adaptor or memory card while deleting files, otherwise the storage media may be damaged.

- To protect important images from accidental deletion, activate the image protection. ➥page 71
- Protected images cannot be deleted. To delete a protected image, cancel the protect function first.
- If the write protection tab on a memory card is set to lock, you cannot delete. ➥page 32
- You can also format the storage media to delete all the images at once. Be aware that all files and data including protected files will be erased.
- The Delete function does not operate if the battery charge is insufficient. It is recommended to use the AC power adaptor to avoid power-loss of the camcorder while deleting.

Protect

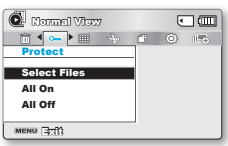
- You can protect saved important videos (or photos) from accidental deletion.
- Protected images will not be deleted unless you release the protection or format the memory.

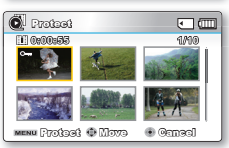
PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video or Photo thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Protect."**

2. Select an option by moving the **Control** joystick (▲/▼) and then press the **OK** button.





Submenu Items

items	contents	on-screen display
"Select Files"	Protects selected videos (or photos) from deletion - To protect individual videos (or photos), select the desired videos (or photos) by pressing the **OK** button, then press the **MENU** button to confirm. - The indicator (⊙🔑) is displayed on the selected videos (or photos). - Pressing the **OK** button toggles the selection between protection and release.	-
"All On"	Protects all videos (or photos).	-
"All Off"	Deletes all videos (or photos).	-

3. The pop-up selection menu will appear depending on the selected menu item. In this case, select the desired item with the **Control** joystick (◀/▶) and the **OK** button.

- Protected videos (or photos) will show the indicator (⊙🔑) when they are displayed.
- If the write protection tab on a memory card is set to lock, you cannot set image protection.

playback options

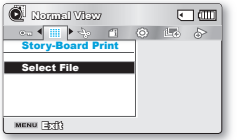
Story-Board Print

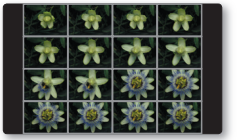
This function captures 16 still images arbitrarily from the selected video and saves them into the storage media. It presents a quick overview of your video, helping you to understand the overall topic.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶/**OK**) → **"Story-Board Print"** → **"Select File."**
2. Use the **Control** joystick (▲/▼/◀/▶) to select the desired videos, and then press the **OK** button.
   - A message appears asking for your confirmation.
3. Select **"Yes."**
   - The printed storyboard image files appear on the LCD screen for about 3 seconds.
   - 16 pictures are randomly captured from the selected video and saved to the storage media.





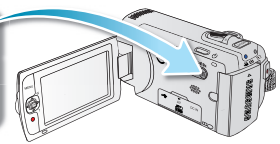
- Storyboard images are displayed in 4:3 aspect ratio. Hence, it may not display the entire image on the LCD screen. On a computer, it will display the entire image.
- **Using the *i*VIEW button, you can preview storyboard images to be printed.** **➥page 73**
- The storyboard printing may not show all 16 i-Frame thumbnails in following case:
  - Recorded video is too short (To extract 16 i-Frame thumbnails from a video, its recorded time should be longer than 8 seconds.)

Using iVIEW

This function provides a preview of the 16 image storyboard from a selected video.

iVIEW

SMART AUTO

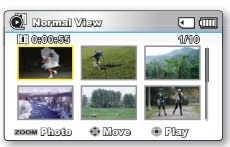


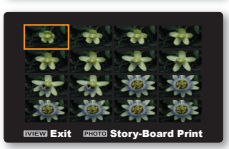
PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video thumbnail index view screen. ➥page 40

1. Use the **Control** joystick (▲/▼/◀/▶) to select the desired videos, and then touch the **iVIEW** touch button.

- 16 i-Frame images appear on the LCD screen.
- The 16 images from the selected video are selected arbitrarily.
- If you want to save the storyboard image on the storage media, press the **PHOTO** button. Then you can find the saved storyboard image in the photo play mode. ➥page 43





- If the recorded video is less than 8 seconds long, all 16 i-Frame thumbnails will not be extracted.
- This function is available only in the video thumbnail index view screen.

playback options

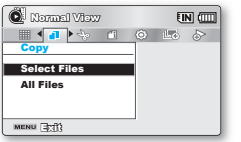
Copy (SMX-F43/F44 only)

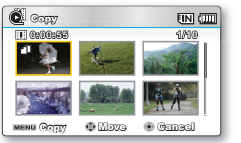
- Movies and photos stored in the built-in memory can be copied to the external flash memory card.
- Copying to the memory card does not delete originals in the built-in memory.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video or Photo thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Copy."**
2. Select an option by moving the **Control** joystick (▲/▼) and then press the **OK** button.





Submenu Items

items	contents	on-screen display
"Select Files"	Copies the individual videos (or photos). - To copy individual videos (or photos), select the desired videos (or photos) by pressing the **OK** button. - The indicator (✓) is displayed on the selected videos (or photos), then press the **MENU** button to confirm. - Pressing the **OK** button toggles between selecting and releasing the copy function.	-
"All Files"	Copies all the videos (or photos).	-

3. The pop-up selection menu will appear depending on the selected menu item. In this case, select the desired item with the **Control** joystick (◀/▶) and the **OK** button.

- You can not copy a file if the memory card has insufficient free space. Remove unnecessary files before proceeding. ➥page 70
- You can copy only as many files as the total size is less than the free space of the memory card. If the size of the files that you want to copy is larger than the free space, you will see an error message.
- If a memory card is not inserted, you cannot perform the "Copy" function.
- Copied videos (or photos) have no protection even if the original is set to be protected.
- Copying may take a while depending on the number of files and file size.
- Copying may not operate if the battery charge is insufficient. If available, use the AC adaptor while copying to prevent power disconnection.
- Note that removing the battery pack or disconnecting the AC power adaptor while you copy files may damage the storage media.

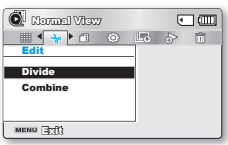
Edit (Divide)

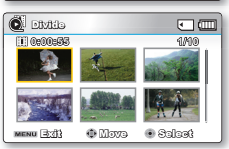
You can divide a video clip as many times as you want in order to delete a section you no longer need. The videos will be divided in groups of two.

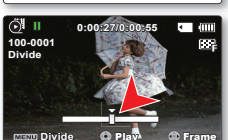
PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Edit"** → **Control** joystick (▲/▼/**OK**) → **"Divide."**
2. Select a desired video clip using the **Control** joystick (▲/▼/◀/▶/**OK**).
   - The selected video clip will be paused.
3. Search the point of division by moving the **Control** joystick (◀/▶/**OK**).
4. Press the **MENU** button to pause at the point of division.
   - A message appears asking for your confirmation.
5. Select **"Yes."**
   - If you want to delete an unwanted section of a video clip, divide the video first, and then delete the image (section) you no longer need. After dividing the video clip, you can also combine other desired videos. ➥page 76
   - The second image of the divided image will be displayed at the end of the thumbnail index.







Example: You can divide a video clip into two in order to delete a section you no longer need.

1. Before dividing	2. Image is divided at 30 second point.		3. After deleting first image.
0~60 seconds	**0~30 seconds**	**31~60 seconds**	**0~30 seconds**

- One video clip is divided into two video clips.

- **The Divide function is not available in the following conditions:**
  - If the total recorded time of the video is less than 6 seconds.
  - If you trying to divide sections without leaving 3 seconds at the beginning and the end.
  - If the remaining section of the storage media space is less than approx.40MB.
  - Videos recorded or edited by other devices.
- You can not delete a protected image. You must first release the protect function to delete it. ➥page 71
- The division point may drift before or after the designated point by approximately 0.5 seconds.

playback options

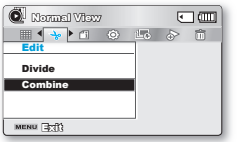
Edit (Combine)

You can combine two different video clips.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Video thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Edit"** → **Control** joystick (▲/▼/**OK**) → **"Combine."**
2. Select a desired video clip using the **Control** joystick (▲/▼/◀/▶/**OK**).
   - The (✔) indicator is displayed on the selected video clips.
   - Selecting the video thumbnail image toggles between the video thumbnail image being selected for combining (the (✔) indicator appears on image) or not (the (✔) indicator is removed from image).
3. Press the **MENU** button.
   - A message appears asking for your confirmation.
4. Select **"Yes."**
   - The two video clips are combined in the selected order and restored as one video clip.
   - The thumbnail of the first video clip will appear in the combined video clip.



- The combine function is not available in the following conditions:
  - Videos in different resolution formats (TV Super Fine/TV Fine/TV Normal vs Web Fine/Web Normal) cannot be combined.
  - Videos in different aspect ratio cannot be combined. (4:3 vs 16:9 wide)
  - The video file recorded in the Time Lapse REC mode and normal record file cannot be combined.
  - If the total size of the two files to be combined exceeds approx.1.8GB
  - If the remaining section of the storage media space is less than approx.40MB.
  - If you combine videos having the same resolution but different qualities, the combined video will have the lower image quality for playback. (For example, if you combine a video clip of **"TV Super Fine"** with another video clip of **"TV Fine,"** which has the same resolution, then the combined video will be in **"TV Fine"** resolution and quality.)
  - Videos recorded or edited by other devices.
- You cannot combine protected images. You must first release the protect function to paste it. ➥page 71
- The original video clips will not be preserved.
- A maximum of 2 video clips can be combined at a time.
- This function is available only in the thumbnail index view screen.

Slide Show

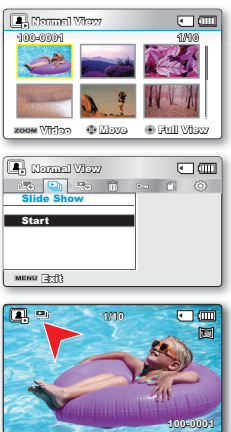
You can playback all the photos stored in the storage media automatically.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Photo thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **“Slide Show” → “Start.”**

2. Press the **OK** button.
   - The (▶) indicator is displayed. The Slide Show will start from the current image.
   - To end the slide show, press the **OK** button again.
   - To return to the thumbnail view, move the **Zoom** lever.



- 4 background music files are stored in the camcorder by default. When a slide show begins, it plays background music in arbitrary order.
- You can adjust the background music’s volume level using the **Control** joystick (▲/▼).

playback options

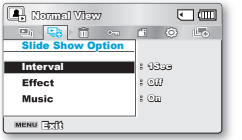
Slide Show Option

You can enjoy a slide show with various effects.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode.
- Select the Photo thumbnail index view screen. ➥page 40

1. Press the **MENU** button → **Control** joystick (◀/▶) → **"Slide Show Option."**
2. Select an option by moving the **Control** joystick (▲/▼/◀/▶), and then press the **OK** button.



Submenu Items

items	contents	on-screen display
"Interval"	Set the slideshow's image transition interval. (1 sec or 3 sec)	-
"Effect"	If the **"Effect"** is set to **"On"**, the slideshow displays images consecutively.	-
"Music"	If the **"Music"** is set to "On", the slideshow will play back with background music. (The background music is selected randomly from 4 sample music files stored.)	-

3. Press the **MENU** button to exit the menu.

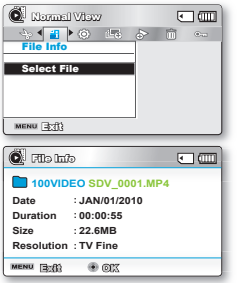
File Info

This camcorder shows you information on the recorded images.

PRECHECK!

- Press the **MODE** button to select the Play(▶) mode. ➥page 24

1. Press the **MENU** button → **Control** joystick (◀/▶/**OK**) → **"File Info"** → **"Select File."**
   - The file information of the selected file appears.
2. Select a desired video clip using the **Control** joystick (▲/▼/◀/▶/**OK**).
   - The information of the selected file is displayed as shown below.
     - Date
     - Duration
     - Size
     - Resolution
3. Press the **MENU** button to exit the menu.



system setting

MENU ITEMS ( )

You can setup the date/time, OSD language and display settings of the camcorder.

● : Possible
× : Not possible

Setting menu items ( )

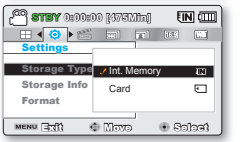
Items	Record (/) mode	Play mode (Thumbnail index screen)		Play mode (Full image display mode)		Default values	Page
		Video	Photo	Video	Photo		
Storage Type *	●	●	●	×	×	Int. Memory	80
Storage Info	●	●	●	●	●	-	80
Format	●	●	●	●	●	-	81
File No.	●	●	●	●	●	Series	82
Time Zone	●	●	●	●	●	Home	82
Date/Time Set	●	●	●	●	●	-	84
Date Type	●	●	●	●	●	-	84
Time Type	●	●	●	●	●	12Hr	85
Date/Time Display	●	●	●	●	●	Off	85
LCD Brightness	●	×	×	×	×	0	86
LCD Color	●	×	×	×	×	0	86
Auto LCD Off **	●	●	●	●	●	On	87
Menu Design	●	●	●	●	●	Misty White	87
Transparency	●	×	×	×	×	0%	88
Beep Sound	●	●	●	×	●	On	88
Shutter Sound	●	●	●	●	●	On	89
Auto Power Off **	●	●	●	●	●	5 Min	89
PC Software	●	●	●	●	●	On	90
TV Display	●	×	×	●	●	On	90
Default Set	●	●	●	×	×	-	91
Version	●	●	●	●	●	-	91
Language	●	●	●	●	●	English	91
Demo	●	×	×	×	×	On	92

- These menu items and default values may be changed without notice.
- There are some functions you cannot activate simultaneously in the menu. You cannot select the grey menu items.
- Items marked with * are available only with models SMX-F43/F44.
- Items marked with ** are available only when the camcorder is supplied the power using the battery pack.

Storage Type (SMX-F43/F44 only)

You can record videos (or photos) on the built-in memory or a memory card, so you should select the desired storage media before starting recording or playback.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Storage Type."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

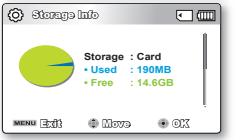
items	contents	on-screen display
"Int. Memory"	Select the built-in memory for storage medium. You can record or play back images on the built-in memory.	IN
"Card"	Select a memory card as storage medium. You can record or play back images on a memory card.	

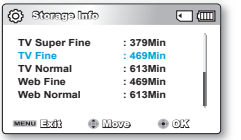
If there is no storage media inserted, it cannot be selected and will be dimmed on the menu.

Storage Info

It shows you the storage information. You can view the storage media, used memory space and available memory space.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Storage Info."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
   - Move the **Control** joystick (▲/▼) to select the desired storage type, then press the OK button. (SMX-F43/F44 only)
3. Information on the selected storage type appears.
   - The screen displays the memory capacity of the selected storage and recordable time by video resolution.
   - Move the **Control** joystick (▲/▼) to see the desired information.
   - After checking the information, press the **OK** button to return to the previous menu screen.
4. Press the **MENU** button to exit the menu.





Submenu Items

items	contents	on-screen display
"Int. Memory" (SMX-F43/F44 only)	It shows you the memory information of the built-in memory.	-
"Card"	It shows you the memory information of the inserted memory card.	-

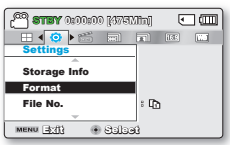
- If there is no storage media inserted, it cannot be selected and will be dimmed on the menu.
- In the Storage Info display, you can check the used and available memory as well as the remaining recording time for each recording resolution. For the desired information, scroll the screen using the **Control** joystick (▲/▼).

Format

Use this function if you want to delete all files completely or to correct problems on the storage media.

PRECHECK!

After formatting, the speed of the storage media becomes more stable. However, ensure that formatting can delete all files on the storage media including protected files and all settings can be restored.



1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Format."**
2. Select the desired storage media with the **Control** joystick (▲/▼) and then press the **OK** button. (SMX-F43/F44 only)
3. A message appears asking for your confirmation.
   - Select **"Yes"** using the **Control** joystick (◄/►/**OK**).
4. Press the **MENU** button to exit the menu.

Submenu Items

items	contents	on-screen display
"Int. Memory" (SMX-F43/F44 only)	Formats the built-in memory.	-
"Card"	Formats a memory card.	-

- Do not remove the recording medium or perform any other operation (such as turning off the power) during formatting. Also, be sure to use the provided AC adapter, as the recording medium may be corrupted if the battery becomes exhausted during formatting.
- If the recording medium becomes corrupted, format it again.

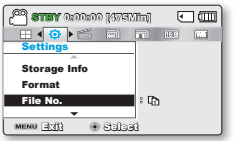
- **Do not format the storage media on a PC or other device.**
  Make sure to format the storage media on this camcorder.
- Format the memory card in the following cases:
  - before using a new memory card
  - a memory card formatted/recorded on other devices
  - when this camcorder cannot read the memory card
- A memory card with the protection tab set to lock will not be formatted.
- If there is no storage media inserted, it can not be selected and will be dimmed in the menu.
- You cannot format when the battery power is insufficient. It is recommended to use the AC power adaptor to avoid power-loss while formatting.

system setting

File No.

File numbers are assigned to recorded files in the order they were recorded.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"File No."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

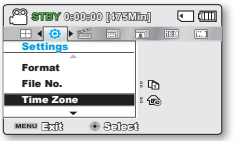
items	contents	on-screen display
"Series"	Assigns file numbers in sequence even if a memory card is replaced with another one or after formatting, or after deleting all files. The file number is reset when a new folder is created.	-
"Reset"	Resets the file number to 0001 even after formatting, deleting all files or inserting a new memory card.	-

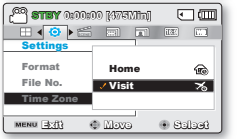
When you set **"File No."** to **"Series."** each file is assigned with a different number so as to avoid duplicating file names. It is convenient when you want to manage your files on a computer.

Time Zone

You can easily set the clock to the local time when using your camcorder while travelling.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Time Zone."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.





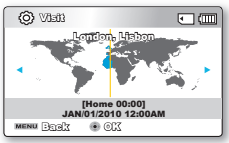
Submenu Items

items	contents	on-screen display
"Home"	The clock will be used according to your setting on the "Date/Time Set" menu. Select it when using this camcorder for the first time or when returning the clock to your hometown date/time setting.	-
"Visit"	When you visit a different time zone, it allows you to use the local time without changing your hometown time setting. The clock will be adjusted in accordance with the time difference between the two locations.	

Setting the clock to the local time (“Visit”)

You can easily set the clock to the local time zone when travelling.

1. Move the **Control** joystick (▲/▼) to select the **“Time Zone”** in Settings mode, and then press the **OK** button.
   - The Time Zone screen will be displayed.
2. Select **“Visit”** with the **Control** joystick (▲/▼/**OK**), and then select your local area using the **Control** joystick (◄/►).
   - You can check the time difference between **“Home”** and **“Visit.”**
3. Press the **OK** button to confirm.
   - The clock is set to the time zone of the place you are visiting.



You can set the date and time in **“Date/Time Set”** from the **“Settings”** menu. ➥page 84

Cities used to set the time zone

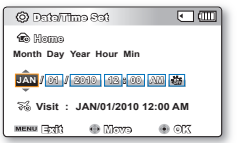
Cities	Time zone	Cities	Time zone
London, Lisbon	+00:00	Adelaide	+09:30
Rome, Paris, Berlin, Stockholm, Madrid, Frankfurt	+01:00	Guam, Sydney, Brisbane	+10:00
Athens, Helsinki, Cairo, Ankara	+02:00	Solomon Islands	+11:00
Moskva, Riyadh	+03:00	Wellington, Fiji	+12:00
Tehran	+03:30	Samoa, Midway	-11:00
Abu Dhabi, Muscat	+04:00	Honolulu, Hawaii, Tahiti	-10:00
Kabul	+04:30	Alaska	-09:00
Tashkent, Karachi	+05:00	LA, San Francisco, Vancouver, Seattle	-08:00
Calcutta, New Delhi	+05:30	Denver, Phoenix, Salt Lake City	-07:00
Kathmandu	+05:45	Chicago, Dallas, Houston, Mexico City	-06:00
Almaty, Dacca	+06:00	New York, Miami, Washington D.C., Montreal, Atlanta	-05:00
Yangon	+06:30	Caracas, Santiago	-04:00
Bangkok	+07:00	Buenos Aires, Brasilia, Sao Paulo	-03:00
Hong Kong, Beijing, Taipei, Singapore, Manila	+08:00	Fernando de Noronha	-02:00
Seoul, Tokyo, Pyongyang	+09:00	Azores, Cape Verde	-01:00

The times are based on Greenwich Mean Time (GMT).

Date/Time Set

By setting the date and time, you can display the date and time of the recording during playback.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Date/Time Set."**
2. Select the date and time information, and change the setting values by using the **Control** joystick (▲/▼/◄/►).
3. Make sure the clock is correctly set, and then press the **OK** button.



- The year can be set up to 2037.
- Set **"Date/Time Display"** to on. ➥page 85
- Activating the (⚙) icon forwards the time by 1 hour.

Date Type

You can set the display type for the date set according to the selected option.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Date/Type."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

Submenu Items

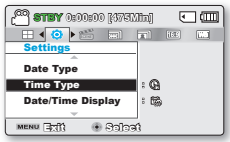
items	contents	on-screen display
"2010/01/01"	The date is displayed in the year/month (two-digit)/date.	**2010/01/01**
"JAN/01/2010"	The date is displayed in the order of month/date/year.	**JAN/01/2010**
"01/JAN/2010"	The date is displayed in the order of date/month/year.	**01/JAN/2010**
"01/01/2010"	The date is displayed in the date/month (two-digit)/year.	**01/01/2010**

This function depends on the **"Date/Time Display"** setting.

Time Type

You can set the display type for the time set according to the selected option.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Time Type."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

items	contents	on-screen display
"12Hr"	Displays the time information in 12 hour units.	**12:00 AM**
"24Hr"	Displays the time information in 24 hour units.	**00:00**

This function depends on the **"Date/Time Display"** setting.

Date/Time Display

You can set the date and time to be displayed on the LCD screen according to the selected option.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Date/Time Display."**
2. Select the desired submenu and menu item with the **Control** joystick (▲/▼) and the **OK** button.
   - The date/time is displayed on the LCD screen according to the selected option.

Submenu Items

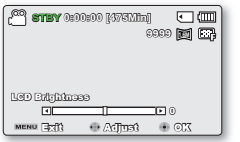
items	contents	on-screen display
"Off"	Current date/time information is not displayed.	-
"Date"	Displays the current date.	**JAN/01/2010**
"Time"	Displays the current time.	**12:00**
"Date & Time"	Displays the current date and time.	**JAN/01/2010 12:00**

The date/time will read "**JAN/01/2010 12:00 AM**" in the following cases;
- When video or photo recording was made before setting the date/time in the camcorder.
- When the built-in rechargeable battery is depleted.

LCD Brightness

You can adjust the brightness of the LCD screen to compensate for ambient lighting conditions.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"LCD Brightness."**
2. Move the **Control** joystick (◄/►/**OK**) to adjust the LCD brightness from -15 to 15.
3. Press the **MENU** button to exit the menu.

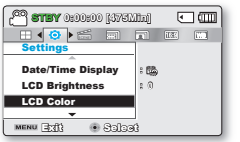


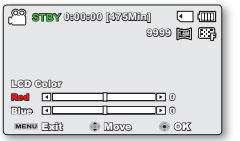
- If the surrounding is too bright, adjust the brightness of the LCD screen.
- Adjusting the LCD screen does not affect the image being recorded.
- Brighter LCD screen consumes more power.
- You can adjust the LCD Brightness from -15 to 15.

LCD Color

You can change the color impression of the screen with a variety of color options by adjusting the red and blue color range.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"LCD Color."**
2. Move the **Control** joystick (▲/▼/◄/►/**OK**) to adjust the LCD color (red/blue) from -15 to 15.
3. Press the **MENU** button to exit the menu.

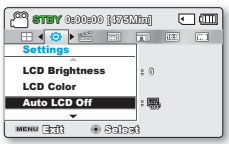




- When you set red and blue color range, the higher the figures, the brighter the LCD screen will be.
- You can adjust the LCD color (red/blue) from -15 to 15, using the **Control** joystick (▲/▼/◄/►/**OK**).
- You can manipulate the color displayed on the LCD screen by adjusting the color ratio of red and blue.
- Adjusting the color display of LCD screen does not affect the image to be recorded.

Auto LCD Off

To reduce power consumption, the brightness of the LCD screen is automatically dimmed if the camcorder is idle for more than 2 minutes.



1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Auto LCD Off."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

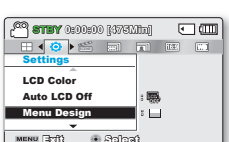
Submenu Items

items	contents	on-screen display
"Off"	Disable the function.	-
"On"	When the camcorder is idle for more than 2 minutes in Video or Photo STBY mode, or for more than 5 minutes when recording a video, the power saving mode starts by dimming the LCD screen.	-

- When this **"Auto LCD Off"** function is enabled, you can press any button on the camcorder to return LCD brightness to normal.
- **Auto LCD Off will be disabled in the following cases:**
  - If the DC power cable (AC power adaptor, USB cable) is connected.

Menu Design

You can select the desired menu design.

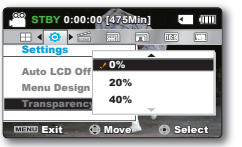


1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Menu Design."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
   - **"Misty White" → "Premium Black."**
3. Press the **MENU** button to exit the menu.

Transparency

You can select the desired transparency to display the menu.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Transparency."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
   - **"0%" → "20%" → "40%" → "60%"**
3. Press the **MENU** button to exit the menu.



<Transparency 0%>

<Transparency 60%>

Beep Sound

This setting allows operations such as touching tabs and buttons on the screen to be signaled by a beep.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Beep Sound."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

Submenu Items

items	contents	on-screen display
"Off"	Disables the function.	-
"On"	When on, a beep will sound every time a button is pressed.	-

The Beep Sound function is cancelled in the following cases:
- During recording, playing
- When the camcorder has a cable connection. (AV cable)

Shutter Sound

You can turn the shutter sound on or off when pressing the **PHOTO** button.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Shutter Sound."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

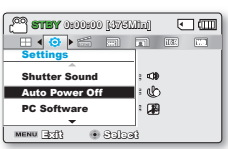
Submenu Items

items	contents	on-screen display
"Off"	Disables the function.	-
"On"	You will hear the shutter sound when operating the **PHOTO** button.	-

Auto Power Off

You can set your camcorder to automatically turn off if it is idle for 5 minutes without an operation. This function will prevent unnecessary power consumption.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Auto Power Off."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

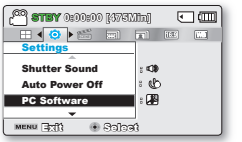
items	contents	on-screen display
"Off"	Disables the function.	-
"5 Min"	If the camcorder is idle for 5 minutes in STBY mode, the power is automatically turned off.	-

- Auto Power Off does not work in the following situations:
  - If the DC power cable (AC power adaptor, USB cable) is connected
  - While the following functions are in operation; **"Demo," "Copy," "Delete: All Files," "Protect: All On," "Combine," "Divide."**
  - While in recording, playing (except pause), Photo slide show.
- To operate the camcorder again, press the **Power** (⏻) button.

PC Software

If you set PC Software to On, you can simply use the PC software by connecting the USB cable between the camcorder and your PC. You can download the stored video and photo images on the camcorder to your PC's hard disk. Editing video/photo files is also available using the PC software.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"PC Software."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.



Submenu Items

items	contents	on-screen display
"Off"	Disables the function.	-
"On"	The built-in editing software launches when the camcorder is connected to the PC.	-

The PC Software is compatible with the Windows OS only.

TV Display

You can enable or disable the On Screen Display (OSD) that appears on the TV screen when connecting your camcorder to a TV.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"TV Display."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. Press the **MENU** button to exit the menu.

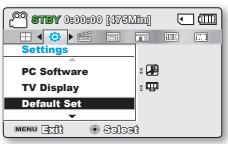
Submenu Items

items	contents	on-screen display
"Off"	The OSD (On Screen Display) menus are only shown on the LCD screen.	-
"On"	The OSD menus are shown on the LCD screen and the TV screen as well. (Connecting to a TV ➥page 93)	-

Default Set

You can restore all menu settings to the default conditions.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Default Set."**
2. Select **"Yes"** if you want all the settings return to the default.
   - The Time Zone screen appears after all settings return to the default.
3. Set the date and time again. ➥page 28

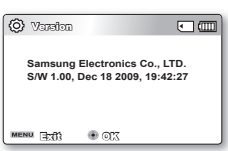


- Do not turn off the power while using this function.
- After resetting the camcorder, set **"Time Zone"** and **"Date/Time Set."** ➥page 28
- Storage type is not restored after default setting. (SMX-F43/F44 only) ➥page 80

Version

The version information may be changed without notice for improvement.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Version."**
2. Press the **MENU** button to exit the menu.



Language

You can select a desired language to display the menu and messages. ➥page 29

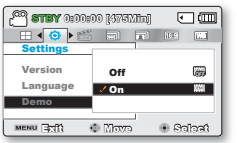
Demo

Demo mode automatically shows you the major functions that are included with your camcorder so that you may use them more easily.

1. Press the **MENU** button → **Control** joystick (◄/►) → **"Settings"** → **Control** joystick (▲/▼/**OK**) → **"Demo."**
2. Select the desired submenu item with the **Control** joystick (▲/▼), and then press the **OK** button.
3. To return to the normal screen, press the **MENU** button.

Submenu Items

items	contents	on-screen display
"Off"	Disable the function.	-
"On"	Enables the Demo function.	-



Using the Demo function

- The Demo mode is cancelled in the following cases:
  - If any button is operated (**Recording start/stop**, **PHOTO**, **SMART AUTO**, etc.) However, the camcorder will enter the Demo mode automatically after 5 minutes in STBY mode if it is idle for 5 minutes without operation. If you don't want the Demo function to start, set **"Demo"** to **"Off."**

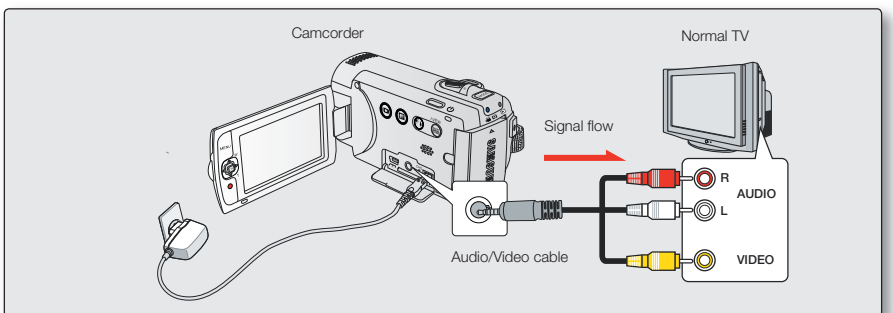
The Demo function does not operate in the following cases:
- If **"Auto Power Off"** is set to **"5 Min"**(uses the battery as main power), the Auto Power Off function will operate prior to Demo.

connecting to a TV

You can view the recorded videos and photos on a large screen by connecting the camcorder to a TV.

CONNECTING TO A NORMAL (STANDARD DEFINITION) TV (16:9/4:3)

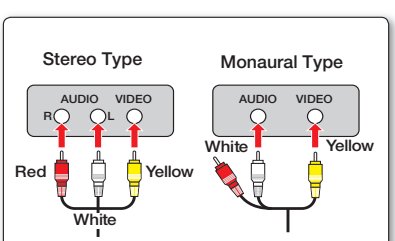
To playback your recordings, the television must be NT-compatible. We recommend that you use the AC power adaptor as a power source for the camcorder. Check your TV's input jacks and select appropriate connection method according to the jack type. For details, refer to your TV user manual.



Use the provided Audio/Video cable to connect the camcorder to a TV as follows:

1. Connect the provided Audio/Video cable to the Audio/Video jack on the TV.
2. Turn on your TV and set the TV's input selector to the Input your camcorder is connected to.
   - Refer to the TV's instruction manual to see how to select the TV input.

- If only a mono audio input is available on the TV set, use the white plug (audio L) on the audio cable.
- Do not use excessive force when connecting the cables.
- It is recommended to use the AC power adaptor as the power source.
- Before connecting, make sure that the volume on the TV is turned down: forgetting this may cause feedback from the TV speakers.
- Carefully connect the input and output cables to the corresponding connections on the device the camcorder is being used with.



connecting to a TV

VIEWING ON A TV SCREEN

1. Turn on your TV and set the TV's input selector(source) to the input the camcorder is connected to. ➥page 93
   - The TV jacks are connected with the right cables?
   - Input source list is correctly set to view the playback from the camcorder?
2. Select the playback mode on your camcorder and start to playback videos.
   - Use the same methods for the operation modes including the playback.

- Adjust the volume at the moderate level. If the volume is too high, the video information may include the noise.
- If the **"TV Display"** is set **"Off,"** TV screen does not include the OSD (On Screen Display) menus. ➥page 90
- This camcorder does not support the audio output signal when the camcorder is connected with TV in the video or photo record mode. The audio output signal is supported as long as the camcorder is connected in the video playback mode. This is not an error.

Image display depending on LCD and TV screen ratio

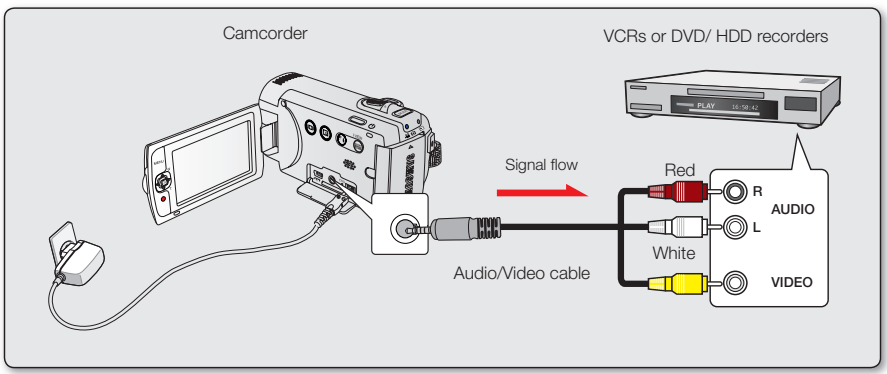
■ Icon ● Subject

	Video	Photo	LCD	TV	
				16:9	4:3
16:9					
4:3					

Refer to page 49 for the **"16:9 Wide"** setting.

DUBBING TO VCR OR DVD/HDD RECORDERS

You can dub images played back on your camcorder to other recording devices, such as VCRs or DVD/HDD recorders. This is a convenient way of distributing the dubbed media. Connect the device as the following way. Connect your camcorder to the wall outlet using the supplied AC power adaptor for this operation. Refer to the instruction manuals supplied with the devices to be connected.



1. Turn on the camcorder and press the **MODE** button to select the Play mode. ➥page 24
2. Insert the recording media in the recording device.
   - If your recording device has an input selector, set it to the input mode.
3. Connect your camcorder to the recording device (VCRs or DVD/HDD recorders) with the supplied composite/AV cable.
4. Start the playback on your camcorder, and record it on the recording device.
   - Refer to the instruction manuals supplied with your recording device for details.
5. When dubbing is finished, stop the recording device, and then your camcorder.

- Videos recorded on this camcorder can be dubbed by connecting with the supplied composite/AV cable. All the recorded videos will be dubbed with SD(standard definition) image quality.
- Since dubbing is performed via analog data transfer, the image quality may deteriorate.
- To hide the screen indicators (such as a counter, etc.) on the screen of the monitor device connected, set **"TV Display: Off."** ➥page 90
- To record the date/time, display it on the LCD screen. ➥page 85

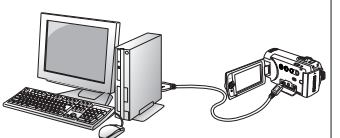
using with a Windows computer

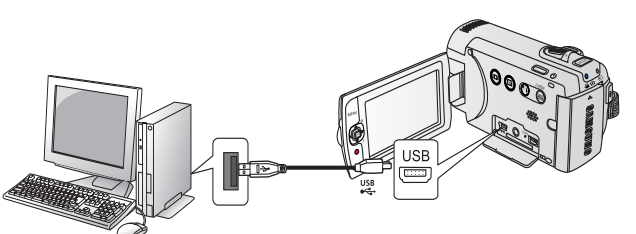
CHECKING YOUR COMPUTER TYPE

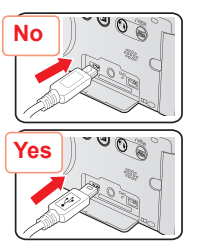
This chapter explains how to connect the camcorder to a computer using the USB cable.

Check your computer type before using!!!

To view your recordings on a computer, you need to check your computer type first. And then, take the steps below according to your computer type.

Using with Windows		Using with Macintosh
Connect your camcorder to the computer using the USB cable. • The built-in editing software, Intelli-studio runs on the PC automatically once the camcorder is connected to a Windows computer. (When you specify "**PC Software: On**"). ➥ page 90		• The built-in software on your camcorder, 'Intelli-studio' is not Macintosh compliant.
Play back or edit your recordings on the computer using the built-in Intelli-studio application. ➥ page 100		
You can also upload your recordings to YouTube or other websites using Intelli-studio. ➥ page 101		





WHAT YOU CAN DO WITH A WINDOWS COMPUTER

You can enjoy the following operations by connecting your camcorder to your Windows computer by using a USB cable.

Main Functions

- By using the built-in editing software, 'Intelli-studio' on your camcorder, you can enjoy the following operations.
  - Playing back recorded videos or photos. ➥page 100
  - Editing recorded videos or photos. ➥page 100
  - Uploading the recorded videos and photos to YouTube, Flickr or Facebook, etc. ➥page 101
- You can transfer or copy the files (videos and photos) saved on the storage media into your computer. (the mass storage function) ➥page 102

System Requirements

The following requirements must be satisfied to use built-in editing software (Intelli-studio):

Items	System Requirements
OS	Windows XP/Vista/Windows 7
CPU	Intel® Pentium® 4 3.0 GHz or higher AMD Athlon™ FX 2.2 GHz or higher (Notebook: Intel Core2 Duo 2.2GHz or AMD Athlon X2 Dual-Core 2.6GHz above recommended)
RAM	1 GB and above recommended
Video Card	nVIDIA Geforce 7600GT or higher Ati X1600 series or higher
Display	1024 x 768, 16-bit color or higher (1280 x 1024, 32-bit color recommended)
USB	USB 2.0
Direct X	DirectX 9.0c or higher

- System requirements mentioned above are recommendations. Even on a system that satisfies the requirements, operations may not be ensured depending on the system.
- On a slower computer than recommended, video playback may skip frames or operate unexpectedly.
- When the version of DirectX on your computer is lower than 9.0c, install the program with the version of 9.0c or higher.
- It is recommended to transfer the recorded videos to a PC before playing back or editing the videos.
- Using with a laptop requires higher system requirements than those of desktop PC.

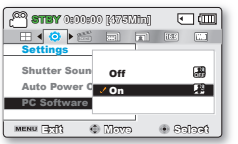
USING THE INTELLI-STUDIO PROGRAM

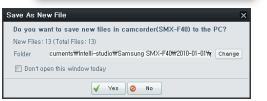
Using the Intelli-studio program built-in your camcorder, you can transfer video/photo files onto your PC and edit them on your computer. The Intelli-studio offers the most convenient way for you to manage the video/photo files by using the simple USB cable connection between the camcorder and your PC.

Transferring your recorded videos/photos to your computer

Step 1. Connecting the USB cable

1. Set the menu setting to **"PC Software: On."** ➥page 90
   - You will find the default menu settings are set as the above.
2. Connect the camcorder and the PC with the USB cable.
   - A new file saving screen appears with the Intelli-studio main window.
   - According to your computer type, the corresponding removable disk window appears.
3. Click **"Yes,"** the uploading procedure will start. Click **"Yes"** to confirm.
   - If you do not want to save a new file, select "**No.**





To disconnect the USB cable

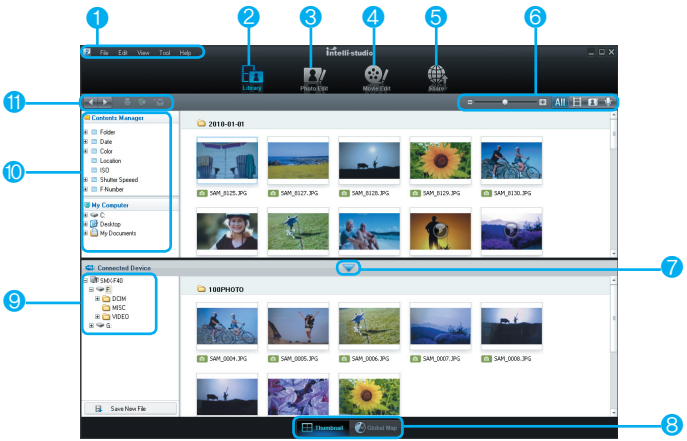
After completing the data transfer, make sure to disconnect the cable in the following way:

1. Click the **"Safely Remove Hardware icon"** icon on the taskbar.
2. Select **"USB Mass Storage Device,"** and then click **"Stop."**
3. If the "**Stop a Hardware device**" window appears, click "**OK.**"
4. Disconnect the USB cable from the camcorder and PC.

- Use the provided USB cable.
- Don't apply excessive force when inserting or extracting the USB cable into/from a USB jack.
- Insert a USB after checking the direction of its insertion is correct.
- We recommend using the AC power adaptor as the power supply instead of the battery pack.
- When the USB cable is connected, turning the camcorder on or off may cause the PC to malfunction
- If you disconnect the USB cable from the PC or the camcorder while transferring data, the data transmission will stop and the data may be damaged.
- If you connect the USB cable to a PC via a USB HUB or simultaneously connect the USB cable along with other USB devices, the camcorder may not work properly. If this occurs, remove all USB devices from the PC and reconnect the camcorder.
- According to your computer type, the Intelli-studio program may not automatically run. In this case, open the desired CD-ROM drive that has the Intelli-studio program in My Computer and run iStudio.exe.
- When a USB cable is connected, if you have EmoDio (Samsung's MP3 player software) installed on your computer, the EmoDio software may load first.

Step 2. About the Intelli-studio main window

- When the Intelli-studio starts up, thumbnails of videos and photos are displayed in the main window. The window is divided into upper and lower sections. The upper section contains video/photo thumbnails currently stored on your computer. The lower section contains thumbnails stored on your camcorder (connected device).



1 Menu items

2 Switches to Library of the PC and connected camcorder.

3 Switches to Photo Edit mode.

4 Switches to Movie Edit mode.

5 Switches to Share mode.

6 Changes the size of thumbnails.

- All: Displays all files (videos and photos).
- Displays video files only.
- Displays photo files only.
- Displays voice files only.

7 Minimizes the Connected Device screen.

8 Displays videos and photos in various ways.

- Thumbnail: Displays video and photo thumbnails
- Global Map: Displays the location of shooting place with a map.

9 Selects the Connected Device.

10 Shows directories of My Folder and My Computer

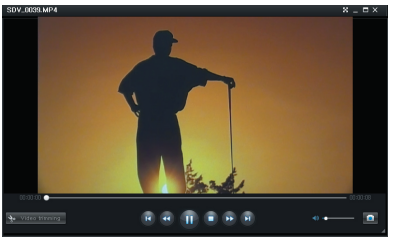
- My Folder: You can classify and manage videos and photos on your computer.
- My Computer: You can view videos and photos saved in the selected directory of your PC.

11 Shortcut icons

- Navigates files (previous and next).
- Prints selected photo(s).
- Views location of selected photo(s) with GPS information.
- Registers to My Folder.

Intelli-studio program is built in both Samsung camcorders and Samsung digital cameras. Some functions on the program may not work depending on the product.

Step 3. Playing back the videos (or photos)



- You can play back the recordings conveniently using the Intelli-studio application.

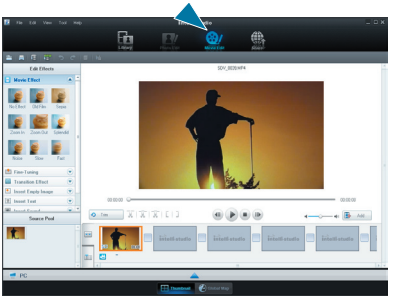
1. Run the Intelli-studio program. ➥page 98
2. Click the desired folder to display your recordings.
   - Video (or photo) thumbnails appear on the screen, according to the selected source.
3. Choose the video (or photo) that you want to play.
   - You can check the file information by moving the mouse on over the file.
   - Clicking on a video thumbnail once will show the video playback inside the thumbnail frame, allowing you to search for a desired video with ease.
4. Once you select the desired video (or photo), double-click to play back.
   - Playback starts and playback controls appear.

The following is the file format supportable in Intelli-studio:
- Video formats: MP4 (Video: H.264, Audio: AAC), WMV (WMV 7/8/9)
- Photo formats: JPG, GIF, BMP, PNG, TIFF

Step 4. Editing the videos (or photos)

With Intelli-studio, you can edit videos or photos in various ways. (Change Size, Fine-Tuning, Image Effect, Insert Frame, etc.)

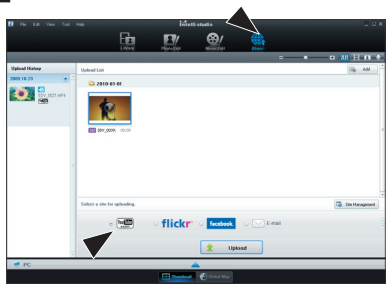
- To edit a file using the Intelli-studio, ensure to use a copy of the desired file saved in My Computer before clicking on the “Edit” (/) icon.

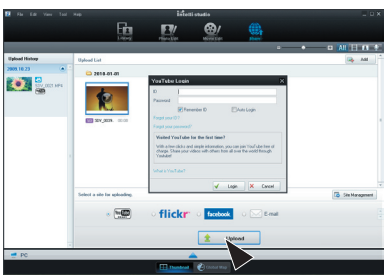


Step 5. Sharing the video/photos online

Share your contents with the world, by uploading photos and videos directly to a web site with one click.

1. Select the desired videos or photos to share.
2. Click (Share) on the browser.
   - The selected file appears on the sharing window.
3. Click the website you would like to upload files.
   - You can choose **"YouTube," "Flickr,"** **"Facebook"**or the specified website you want to set for your uploading management.
4. Click **"Upload"** to start uploading.
   - A pop up window appears asking your ID and the password.
5. Enter your ID and the password to access.
   - Access to the web site contents can be limited depending on your web access environment.





For more information about Intelli-Studio, see the Help Guide by clicking the menu item, **"Help" -> "Help."**

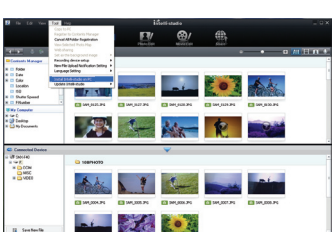
Exporting the videos/photos to your computer

You can export the recorded videos/photos from your camcorder to a PC.

1. Select the desired files to export.
2. Drag and drop the selected files to the My Computer library window.

Installing Intelli-studio application on the Windows computer

- When the Intelli-studio application is installed on a Windows computer, it will run faster after connecting the camcorder to your computer. Moreover, the application can be updated automatically and run directly in the Windows computer.
- The Intelli-studio application can be installed on a Windows computer as follows:
  Click on **"Tools" → "Install Intelli-studio on PC."** in the Intelli-studio screen.



using with a Windows computer

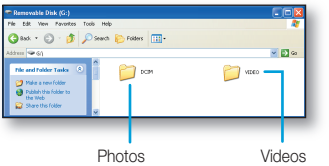
USING AS A REMOVABLE STORAGE DEVICE

You can transfer recorded data to a Windows computer by connecting the USB cable to the camcorder.

Step 1. Viewing the contents of storage media

1. Check the **"PC Software: Off"** setting. ➥page 90
2. Check the storage media.
   (If you have video or photos recorded on a memory card, insert a memory card.) (SMX-F43/F44 only)
3. Connect the camcorder to the PC with the USB cable. ➥page 96
   - The "Removable Disk" or "Samsung" window appears on the PC's screen after a moment.
   - The removable disk appears when connecting a USB.
   - Select "Open folders to view files using Windows Explorer" and click "OK."
4. The folders in the storage media appear.
   - Different file types are stored in different folders.

Removable Disk (G:)
Windows can perform the same action each time you insert a disk or connect a device with this kind of file:
Pictures
What do you want Windows to do?
using Photo Printing Wizard
View a slideshow of the images
using Windows Picture and Fax Viewer
Copy pictures to a folder on my computer
using Microsoft Scanner and Camera Wizard
Browse picture files
using MediaShow
Open folder to view files
using Windows Explorer
Always do the selected action.
OK
Cancel



- If the "Removable Disk" window does not appear, confirm the connection (➥page 96) or repeat steps 1 and 3 again.
- When the removable disk does not appear automatically, open the removable disk folder of My Computer.
- If the connected camcorder's disk drive does not open or the context menu that appears when right-clicking your mouse (open or browse) appears broken, your computer may be infected by an Autorun virus. Be sure to update your antivirus software to the latest version.

Structure of folders and files on the storage media

- The folder and file structure for built-in memory or memory card is as follows.
- Don't arbitrarily change or remove the folder or file name. It may not be playable.

Videos (H.264) ①

- The SD-quality videos are named as "SDV_####.MP4" and Web videos are named as "WEB_####.MP4".
- The file number automatically increases when a new video clip file is created.
- Up to 9,999 files can be created in one folder. A new folder is created when more than 9,999 files are created.

Photos ②

- As with video clip files, the file number automatically increases when a new image file is created.
- The maximum file number allowed is the same as in video clip files. A new folder stores files starting with SAM_0001.JPG.
- The folder name increases in the order of 100PHOTO → 101PHOTO etc.
- Up to 9,999 files can be created in one folder. A new folder is created when more than 9,999 files are created.

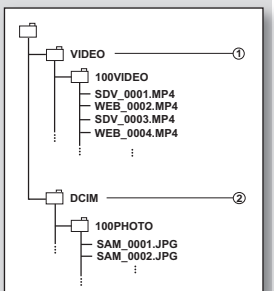


Image format

Videos

- Videos are compressed in H.264 format. The file extension is ".MP4."
- Refer to page 47 for video resolution.

Photos

- Photos are compressed in JPEG (Joint Photographic Experts Group) format. The file extension is ".JPG."
- Refer to page 48 for photo resolution.

- Up to 9,999 files can be created in one folder. A new folder is created when more than 9,999 files are created.
- When the 9,999th file is created in the 999th folder (i.e. SDV_9,999.MP4 is created in the 999 VIDEO folder), no more folders can be created. Backup your files to a PC and format the storage media, and then reset the file numbering from the menu.
- The name of a movie file recorded by the camcorder should not be modified, since proper playback by the camcorder requires original folder and file naming convention.

TROUBLESHOOTING

✪ **Before contacting a Samsung authorized service center, perform the following simple checks. They may save you the time and expense of an unnecessary call.**

Warning indicators and messages

Power source

Message	Icon	Informs that...	Action
Low Battery	-	The battery pack is almost discharged.	• Change to a charged one or use the AC power adaptor. Charge the battery pack.
Check authenticity of the battery.	-	The battery pack failed to authenticate.	• Check the battery's authenticity and change to new one. • Use only genuine Samsung batteries only with this camcorder.

Storage media

Message	Icon	Informs that...	Action
Memory Full (SMX-F43/ F44 only)		There is not enough space to record on the built-in memory.	• Delete unnecessary files on the built-in memory. Use a memory card. • Back-up files to your PC or another storage media and delete files.
Insert Card		There is no memory card inserted in the card slot.	• Insert a memory card.
Card Full		There is not enough space to record on a memory card.	• Delete unnecessary files on a memory card. Use the built-in memory. (SMX-F43/F44 only) • Back-up files to your PC or another storage media and delete files. • Change to another memory card which has enough free space.
Card Error		The memory card has some problem and cannot be recognized.	• Format the memory card or replace it with a new one.
Card Locked		The write protection tab on an memory card has been set to lock.	• Release the write protection tab.
Not Supported Card		The memory card is not supported in this camcorder.	• Change to a memory card that we recommended.
Please format		The memory card is not formatted.	• Format the memory card using the menu.

Message	Icon	Informs that...	Action
Not formatted. Format the Card? (Format the Internal Memory?)	-	The format of the file is not supported by this camcorder.	• The file format is not supported. Check the supported file. • Format the memory card using menu item.
Low speed card. Please record a lower resolution.	-	The memory card does not have enough speed to record.	• Record video at a lower resolution. • Change the memory card to a faster one. ➥page 32

Recording

Message	Icon	Informs that...	Action
Write Error	-	Some problems occurred while writing data to storage media.	• Format storage media using menus after backing-up important files to your PC or another storage media.
Release the Smart Auto	-	You cannot operate some functions manually when SMART AUTO is activated.	• Release SMART AUTO function.
Recovering Data…	-	The file was not created normally.	• Wait until data recovery is finished. • Never turn off the power and eject memory card during recording.

Playback

Message	Icon	Informs that...	Action
Read Error	-	Some problems occurred when reading data from storage media.	• Format storage media using menus after backing up important files to PC or another storage device.
The Number of video files is full. Cannot copy videos.	-	Folder and files have reached capacity and you can not record.	• Format the storage media using the menu after backing up important files to your PC or another storage device. Set **“File No.”** to **“Reset.”**
The Number of photo files is full. Cannot copy photos.	-	Folder and files have reached their capacity and you cannot take a picture.	• Format storage media using the menu item after backing up important files to your PC or another storage device. Set **“File No.”** to **“Reset.”**

When there is condensation, put aside for a while before using

- What is condensation?
  Condensation occurs when a camcorder is moved to a place where the temperature differs significantly from the previous place. In other words, the water vapor in the air turns into dew because of the temperature difference, and it condensates like dew on the external or internal lenses of the camcorder and on the reflection lens.
  When this happens, you temporarily may not use the record or play functions of the camcorder. Also, it may cause a malfunction or damage to the camcorder when using the device with the power on while there is condensation.
- What can I do?
  Turn the power off and detach the battery pack, and leave it in a dry area for 1~2 hours before using it.
- When does condensation occur?
  When the device is relocated to a place with a higher temperature than the previous location, or when using it in a hot area suddenly.
  - When recording outdoors in cold weather during the winter and then using it in indoors.
  - When recording outdoors in hot weather after being indoors or inside a car where the air conditioner was running.

Note before sending your camcorder for repair.

- If these instructions do not solve your problem, contact your nearest Samsung authorized service center.
- Depending on the problem, the camcorder's built-in memory (SMX-F43/F44 only) may need to be initialised or replaced and the data will be deleted. Be sure to back up the data on the camcorder to other storage media before sending your camcorder in for repair. Samsung cannot guarantee any loss of your data.

If you encounter any problems using your camcorder, check the following before asking for service repair. If these instructions do not solve your problem, contact the nearest Samsung authorized service center.

Symptoms and solutions

Power

Symptom	Explanation/Solution
The camcorder does not turn on.	• The battery pack may not be installed on your camcorder. Insert a battery pack into the camcorder. • The inserted battery pack may be discharged. Charge the battery pack or replace it with a charged one. • If you use an AC power adaptor, make sure it is properly connected to the wall outlet. • Remove the battery pack or unplug the AC power adaptor, and reconnect the power supply to the camcorder before turning it on.

Symptom	Explanation/Solution
The power automatically turns off.	• Is **"Auto Power Off"** set to **"5 Min"** ? If no button is pressed for about 5 minutes, the camcorder is automatically turned off (**"Auto Power Off"**). To disable this option, change the setting of **"Auto Power Off"** to **"Off."** ➥page 89 • The battery pack is almost discharged. Charge the battery pack or replace it with a charged one. • Use the AC power adaptor.
Power cannot be turned off .	• Remove the battery pack or unplug the AC power adaptor, and reconnect the power supply to the camcorder before turning it on.
The battery pack is quickly discharged.	• The temperature is too low. • The battery pack is not fully charged. Recharge the battery pack. • The battery pack reached the end of its lifespan and cannot be recharged. Use another battery pack.

Displays

Symptom	Explanation/Solution
The TV screen or LCD display has distorted images or has stripes at the top/ bottom or on the left/right.	• It can occur when recording or viewing a 16:9-ratio image on a 4:3-ratio TV, or vice versa. For more details, see the display specification.
Unknown image appears on the LCD screen.	• The camcorder is in Demo mode. If you do not want to see Demo images, change the setting of **"Demo"** to **"Off."** ➥page 92
Unknown indicator appears on the screen.	• A warning indicator or message appears on the screen. ➥pages 104~106
The after image remains on the LCD screen.	• This occurs if you disconnect the AC power adaptor or remove the battery pack before turning the power off.
The image on the LCD screen looks dark.	• Ambient light is too bright. Adjust the brightness and angle of the LCD. • Use the LCD Enhancer function.

Storage Media

Symptom	Explanation/Solution
Memory card functions are not operable.	• Insert a memory card into your camcorder properly. ➥page 31 • If you use a memory card formatted on a computer, format it again directly on your camcorder. ➥page 81
Image cannot be deleted.	• You cannot delete the images protected by another device. Release the protection of the image on the device. ➥page 71 • Release the lock on the write-protect tab of the memory card (SDHC memory card, etc.), if any. ➥page 32
You cannot format the memory card.	• Release the lock on the write-protect tab of the memory card (SDHC memory card, etc.), if any. ➥page 32 • Copy all important recorded files to your PC before formatting. Samsung shall not be responsible for any loss of data. (It is recommended that you copy the data to your PC or other storage media.)
The data file name is not indicated correctly.	• The file may be corrupted. • The file format is not supported by your camcorder. • Only the file name is displayed, if the directory structure does not comply with the international standard.
Does not charge or operate even if the battery pack is inserted.	• Check whether you're using a Samsung battery pack. A non-Samsung battery pack may not be recognized properly by the camcorder.

Recording

Symptom	Explanation/Solution
Pressing the **Recording start/ stop** button does not start recording.	• There is not enough free space to record on the the storage media. • Make sure the memory card is inserted and write-protect tab is set to unlock. • The internal temperature of your camcorder is unusually high. Turn off your camcorder and leave it for a while in a cool place. • Your camcorder is damp and moist inside (condensation). Turn off your camcorder and leave it for about 1 hour in a cool place.
The actual recording time is less than the estimated time.	• The estimated recording time may vary depending on contents and features used. • Recording a fast-moving subject increases the bit rate and consequently the amount of storage space required for the recording, which can lead to a shorter available recording time.
The recording stops automatically.	• There is no more free space for recording on the storage media. Back up important files on your PC and format the storage media or delete the unnecessary files. • If you frequently record or delete files, the performance of the built-in memory will deteriorate. In this case, reformat the built-in memory. • If you use a memory card with a low writing speed, the camcorder automatically stops recording the videos and the corresponding message appears on the LCD screen.
When recording a subject illuminated by bright light, vertical lines appear.	• The camcorder is unable to record these levels of brightness.

troubleshooting

Symptom	Explanation/Solution
When the screen is exposed to direct sunlight during recording, the screen turns red or black for an instant.	• Do not leave the camcorder with the LCD screen exposed to direct sunlight.
During recording, the date/time does not display.	• **"Date/Time Display"** to on. ➥page 85
The beep sound is not heard.	• Set the "Beep Sound" to **"On."** • The beep sound is temporally off while recording videos. • When the Audio/Video cable jack is connected to the camcorder, the beep sound will automatically turn off.
There is a time difference between the point where you press **Recording start/ stop** button and the point where the recorded video starts/stops.	• On your camcorder, there may be a slight time delay between the point when you press Recording start/stop button and the actual point where the recorded video starts/stops. This is not an error.
The recording stops.	• The internal temperature of your camcorder is unusually high. Turn off your camcorder and leave it for a while in a cool place. • Your camcorder is damp and moist inside (condensation). Turn off your camcorder and leave it for about 1 hour in a cool place.
You cannot record a photo image.	• Set your camcorder to Record mode. ➥page 24 • Release the lock on the write-protection tab of the memory card if set. • The storage media is full. Use a new memory card or format the storage media. ➥page 81 Remove unnecessary images. ➥page 70

Adjusting the image during recording

Symptom	Explanation/Solution
Focus does not adjust automatically.	• Set **"Focus"** to **"Auto."** ➥page 57 • The recording conditions are not suitable for auto focus. Adjust the focus manually. ➥page 58 • The lens is dusty on the surface. Clear the lens and check the focus. • Recording is being made in a dark place. Increase the brightness in the place.
The image appears too bright or flickering, or changes in color.	• This occurs when recording images under a fluorescent lamp, sodium lamp, or mercury lamp. Cancel **"iSCENE"** to minimise these phenomena. ➥page 46

Playback on your camcorder

Symptom	Explanation/Solution
Pressing the playback (Play/ Pause) button did not start playing.	• Press the **MODE** button to set Video Play mode. • Image files recorded on another camcorder may not play on your camcorder. • Check out a memory card compatibility. ➥page 32
The Skip or Search function does not work properly.	• If the temperature inside the camcorder is too high, it cannot function properly. Turn the camcorder off, wait for a few moments, and turn it on again.
Playback is interrupted unexpectedly.	• Check if the AC adaptor or battery pack is properly connected and stable.
You cannot hear sound when playing a Time Lapse recording.	• The Time Lapse REC function does not support sound. ➥page 64
Photos stored on a storage media are not displayed in the actual size.	• Photos recorded on other devices may not appear at actual size. This is not an error.

Playback on other devices (TV, etc.)

Symptom	Explanation/Solution
You cannot view the image or hear the sound on the connected device.	• Connect the audio line of the Audio/Video cable jack to your camcorder and the connected device (TV, DVD recorder, etc). (Red color- right, White color- left) • The Audio/Video cable jack is not connected properly. Make sure that the Audio/Video cable jack is connected to the proper jack. ➥page 93

troubleshooting

Connecting to a computer

Symptom	Explanation/Solution
When using the videos, a computer does not recognize your camcorder.	• Disconnect the USB cable from the computer and camcorder, restart the computer, then reconnect it correctly.
Cannot play a video file properly on a PC.	• A video codec is needed to play the file recorded on your camcorder. Install or run the built-in edit software (Intelli-studio). • Make sure you insert the connector in the correct direction, and connect the USB cable to the USB jack on your camcorder firmly. • Disconnect the cable from the computer and camcorder, restart the computer. Reconnect it properly. • Your computer may not have the necessary performance specifications to playback a video file. Check the recommended computer specifications.
Intelli-studio does not function properly.	• Exit the Intelli-studio application, and restart the Windows computer. • Intelli-studio is not Macintosh compliant. • Set **"PC Software"** to **"On"** in the Settings menu. • According to your computer type, the Intelli-studio program may not run automatically. In this case, open the desired CD-ROM drive that has the Intelli-studio program in My Computer and run iStudio.exe.
The image or sound on your camcorder is not played on your computer properly.	• Video playback or sound may stop temporarily depending on your computer. The video or sound copied to your computer is not affected. • If your camcorder is connected to a computer that does not support Hi-speed USB (USB2.0), the images or sound may not be played back correctly. The images and sound copied to your computer are not affected.
The playback screen is paused or distorted.	• Check the system requirements to play a video. ➥page 97 • Exit all other applications running on the current computer. • If a recorded video is played on your camcorder when it is connected to a computer, the image may not play smoothly, depending on the transfer speed. Please copy the file to your PC, and then play it back.

Connecting/Dubbing with other devices (TV, DVD recorder, etc.)

Symptom	Explanation/Solution
You cannot dub correctly using the Audio/Video cable.	• The Audio/Video cable is not connected properly. Make sure that the Audio/Video cable is connected to the proper jack, i.e. to the input jack of the device used for dubbing an image from your camcorder. ➥page 95

General operations

Symptom	Explanation/Solution
The date and time are incorrect.	• Has the camcorder been left unused for a long period of time? The backup built-in rechargeable battery may be discharged. ➥page 28
Pressing a button will not turn on or operate the computer.	• Remove the battery pack or unplug the AC power adaptor, and reconnect the power supply to the camcorder before turning it on.

Menu

Symptom	Explanation/Solution
Menu items are greyed out.	• You cannot select greyed items in the current recording/playback mode. • Most of the menu items cannot be selected when you set the SMART AUTO function. • If there is no storage media inserted, it cannot be selected and will be dimmed on the menu : **"Storage Type," "Storage Info," "Format,"** etc. • There are some functions you cannot activate simultaneously. The following list shows examples of unworkable combinations of functions and menu items. If you want to set the desired functions, do not set the following items first.

<Cannot Use>	<Because of the following setting>
"Anti-Shake(HDIS)"	"Video Resolution : Web Fine, Web Normal"
"Back Light"	"C.Nite"
"C.Nite"	"iSCENE"
"Focus : Face Detection"	"C.Nite", "iSCENE", "Aperture : Manual", "Shutter Speed : Manual", "Digital Effect", "Video Resolution : Web Fine, Web Normal"
"Digital Effect : Mirror, Mosaic, Step printing"	"C.Nite", "16:9 Wide: On", "Anti-Shake(HDIS): On." "Intelli-Zoom"
"Fader"	"Time Lapse REC"
"Shutter Speed : Manual"	"C.Nite", "Aperture : Manual"
"Aperture : Manual"	"C.Nite", "Shutter Speed : Manual"
"Zoom Type : Intelli-Zoom"	"16:9 Wide : Off", "Video Resolution : Web Normal, Web Fine" " Digital Effect : Mirror, Mosaic, Step printing"
"Zoom Type : Digital Zoom"	"C.Nite", "Digital Effect : Mirror, Mosaic, Step printing", "Anti-Shake(HDIS)" "Video Resolution : Web Fine, Web Normal"
"16:9 Wide"	"Video Resolution : Web Fine, Web Normal"
"White Balance"	"Digital Effect : Sepia"

MAINTENANCE

Your camcorder is a product of superior design and craftsmanship and should be treated with care.
The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years.

- For safekeeping of the camcorder, turn off the camcorder.
  - Remove the battery pack and AC power adaptor. ➥pages 18~19
  - Remove the memory card. ➥page 31

Cautions when storing

- **Do not leave the camcorder in a place where the temperature is very high for a long period of time:**
  The temperature inside a closed vehicle or trunk can become very high in a hot weather. If you leave the camcorder in such a place, it could malfunction or the case could be damaged. Do not expose the camcorder to a direct sunlight or place it near a heater.
- **Do not store the camcorder in a place where the humidity is high or in a dusty place:**
  Dust entering the camcorder could cause a malfunction. If humidity is high, the lens could become moldy, and the camcorder could become inoperative. It is recommended that you put the camcorder in a box together with a small silica bag when storing it in a closet, etc.
- **Do not store the camcorder in a place subject to strong magnetism or intense vibration:**
  This could cause malfunctions.
- **Detach the battery pack from the camcorder and store it in a cool place:**
  Leaving the battery pack attached or storing it at a high temperature could shorten its life.

Cleaning the camcorder

Before cleaning, turn off the camcorder and remove the battery pack and AC power adaptor.

- **To clean the exterior**
  - Wipe gently with a soft dry cloth. Do not apply excessive force when cleaning, gently rub the surface.
  - Do not use benzene or thinner to clean the camcorder. The coating of exterior could peel off or the case could deteriorate.
- **To clean the LCD monitor**
  Wipe gently with a soft dry cloth. Be careful not to damage the monitor.
- **To clean the lens**
  Use an optional air blower to blow out dirt and other small objects. Do not wipe the lens with cloth or your fingers.
  If necessary, wipe gently with lens with a paper.
  - Mold may form if the lens is left dirty.
  - If the lens looks dim, turn off the camcorder and leave it for about 1 hour.

ADDITIONAL INFORMATION

Storage media

- **Be sure to follow the guidelines below to prevent corruption or damage to your recorded data.**
  - Do not bend or drop the storage media, or subject it to strong pressure, jolts or vibrations.
  - Do not splash the storage media with water.
  - Do not use, replace, or store the storage media in locations that are exposed to a strong static electricity or electrical noise.
  - Do not turn off the camcorder power or remove the battery or AC power adaptor during recording, playback, or when accessing the storage media.
  - Do not bring the storage media near to objects that have a strong magnetic field or that emit strong electromagnetic waves.
  - Do not store the storage media in locations with high temperature or high humidity.
  - Do not touch the metal parts.
- **Copy the recorded files to your PC. Samsung shall not be responsible for any lost data. (It is recommended that you copy the data from your PC to other media for storage.)**
- **Recorded contents may be lost due to a mistake when handling this camcorder or memory card, etc. Samsung shall not be responsible for compensation for damages due to the loss of recorded contents.**
- **Refer to pages 32~33 for details.**

LCD screen

Before cleaning, turn off the camcorder and remove the battery pack and AC power adaptor.

- **To prevent damage to the LCD screen**
  - Do not push it too hard or knock it on anything.
  - Do not place the camcorder with the LCD screen facing the bottom.
- **To prolong the service life, avoid rubbing it with a coarse cloth.**
- **Be aware of the following phenomena for LCD screen use. They are not malfunctions.**
  - While using the camcorder, the surface around the LCD screen may heat up.
  - If you leave power on for a long time, the surface around the LCD screen becomes hot.

USING YOUR CAMCORDER ABROAD

- **Each country or region has its own electric and color systems.**
- **Before using your camcorder abroad, check the following items.**
- **Power sources**
  The provided AC adaptor features automatic voltage selection in the AC range from 100 V to 240 V. You can use your camcorder in any countries/regions using the AC power adaptor supplied with your camcorder within the AC 100 V to 240 V, 50/60 Hz range.
  Use a commercially available AC plug adaptor, if necessary, depending on the design of the wall outlet.
- **On TV color systems**
  Your camcorder is an **NTSC**-system-based camcorder.
  If you want to view your recordings on a TV or to copy it to an external device, it must be an **NTSC**-system-based TV or an external device and have the appropriate Audio/Video jacks. Otherwise, you may need to use a separate video format transcoder (NTSC-PAL format converter).

The format transcoder is not provided by Samsung.

NTSC-compatible countries/regions

Bahamas, Canada, Central America, Japan, Korea, Mexico, Philippines, Taiwan, United States of America, etc.

PAL-compatible countries/regions

Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.

You can make recordings with your camcorder and view pictures on the LCD screen from anywhere in the world.

specifications

Model name	SMX-F40BN/SMX-F40SN/SMX-F40RN/SMX-F40LN SMX-F400BN/SMX-F400SN/SMX-F400RN/SMX-F400LN SMX-F43BN/SMX-F43SN/SMX-F43RN/SMX-F43LN SMX-F44BN/SMX-F44SN/SMX-F44RN/SMX-F44LN

System	Video signal	NTSC
	Picture compression format	H.264/AVC Format
	Audio compression format	AAC (Advanced Audio Coding)
	Recording resolution	TV Super Fine (about 5.0Mbps), TV Fine (about 4.0Mbps), TV Normal (about 3.0Mbps), Web Fine (about 4.0Mbps), Web Normal (about 3.0Mbps)
	Image device	CCD (Charge Coupled Device) (Max: 680K)
	Lens	F1.8 to 4.9, 52x (Optical), 65x (Intelli), 2200x (Digital) Electronic zoom lens
	Focal length	2.1mm~109.2mm
	Filter diameter	Ø37
LCD screen	Size/dot number	2.7 inches wide, 230k
	LCD screen method	1.6" interlaced scan, LCD panel / TFT active matrix system
Connectors	Composite video out	1.0V (p_p), 75Ω, analog
	Audio output	-7.5dBm 47KΩ, analog, stereo
	USB output	mini USB-B type (USB2.0 High Speed)
General	Power source	5.0V (Using AC adaptor), 3.7V (Using Lithium Ion battery pack)
	Power source type	Power supply (100V~240V) 50/60Hz, Lithium Ion battery pack
	Power consumption	1.7W, 1.9W(LCD on)
	Operating temperature	32℉~104℉ (0℃~40℃)
	Operating humidity	10% ~80%
	Storage temperature	-4℉ ~ 140℉ (-20℃ ~ 60℃)
	Dimensions (W x H x D)	Approx. 2.05''×2.3''×4.43'' (53mm×58.4mm×112.5mm)
	Weight	Approx. 0.476lbs (216.4g) (without battery pack and memory card)
	Internal MIC	Omni-directional stereo microphone

※ These technical specifications and design may be changed without notice.

SAMSUNG
LIMITED WARRANTY

SAMSUNG Electronics America Inc. (SEA), warrants that this product is free from defective material and workmanship.
SEA further warrants that if product fails to operate properly within the specified warranty period and the failure is due to improper workmanship or defective material, SEA will repair or replace the product at it's option.
All warranty repairs must be performed by a SEA authorized service center. The name and address of the location nearest you can be obtained by calling toll free: 1-800 SAMSUNG (1-800-726-7864).
Labor
90 days carry-in
Parts
1 year

On carry-in models, transportation to and from the service center is the customer's responsibility.

The original dated sales receipt must be retained by the customer and is the only acceptable proof of purchase.
It must be presented to the authorized service center.

EXCLUSIONS (WHAT IS NOT COVERED)

This warranty does not cover damage due to accident, fire, flood and/or other acts of God; misuse, incorrect line voltage, improper installation, improper or unauthorized repairs, commercial use, or damage that occurs in shipping.
Exterior and interior finish, lamps, and glass are not covered under this warranty.
Customer adjustments which are explained in the instruction manual are not covered under the terms of this warranty.
This warranty will automatically be voided for any unit found with a missing or altered serial number. This warranty is valid only on products purchased in the United States and Puerto Rico.
Some States do not allow the exclusions or limitations of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT	WRITE
IN THE US	1-800-SAMSUNG (726-7864)	www.samsung.com	Samsung Electronics America, Inc. 85 Challenger Road Ridgefield Park, NJ 07660-2112

RoHS compliant

Our product complies with "The Restriction Of the use of certain Hazardous Substances in electrical and electronic equipment", and we do not use the 6 hazardous materials- Cadmium(Cd), Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr +6), Poly Brominated Biphenyls (PBBs), Poly Brominated Diphenyl Ethers(PBDEs)- in our products.